ORDER NO. MD0105096C2

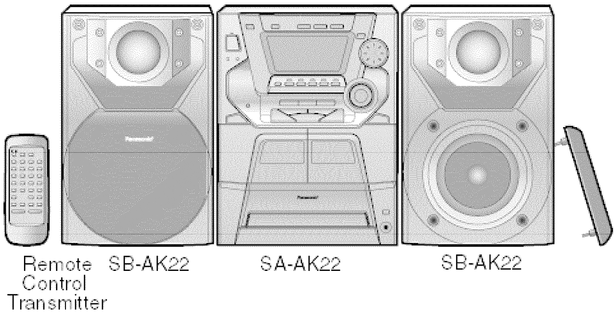
Service Manual

CD Stereo System

COMPACT
disc
DIGITAL AUDIO

SA-AK22

Colour
(S)... Silver Type
Area
(E)... Europe
(EB)... Great Britain
(EG)... Germany and Italy
TAPE SECTION :
SG-2W MECHANISM SERIES
CD SECTION :
RAE0152Z-3 TRAVERSE DECK SERIES


Remote Control Transmitter
SB-AK22
SA-AK22
SB-AK22

SPECIFICATIONS

Specifications

AMPLIFIER SECTION

RMS power output	
THD 10%, both channels driven	
both channel driven	
(E,EB)	80 W per channel (6 Ω)
(EG)	60 W per channel (6 Ω)
Input sensitivity	
AUX	250 mV
Input Impedance	
AUX	13 kΩ

FM TUNER SECTION

Frequency range	87.50 - 108.00 MHz (50 kHz steps)
Sensitivity	1.8 μV (IHF)
S/N 26 dB	1.5 μV
Antenna terminal(s)	75 Ω (unbalanced)

AM TUNER SECTION

Frequency range	522 - 1629 kHz (9 kHz steps)
Sensitivity	
S/N 20 dB (at 999 kHz)	560 μV/m

CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s
Frequency response (+3 dB, -6 dB at DECK OUT)	
NORMAL (TYPE I)	35 Hz - 14 kHz
S/N	50 dB (A weighted)
Wow and flutter	0.18% (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

CD SECTION

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/wave length	Semiconductor laser/780 nm
Number of channels	Stereo
Frequency response	20 Hz - 20 kHz (+1, -2 dB)
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

GENERAL

Power supply	
(E,EG)	AC 230-240V, 50 Hz
(EB)	AC 230, 50 Hz
Power consumption	170 W
Power consumption in standby mode	0.4 W

Dimensions (W x H x D)	250 x 332 x 316 mm
Mass	8.2 kg

■ SYSTEM

SC-AK22 (E)	Music Center: SA-AK22 (E) Speaker: SB-AK22 (E)
SC-AK22 (EB)	Music Center: SA-AK22 (EB) Speaker: SB-AK22 (E)
SC-AK22 (EG)	Music Center: SA-AK22 (EG) Speaker: SB-AK22 (E)

Notes:

1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

© 2001 Matsushita Electronics (S) Pte. Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C536, C545, C546 through a 10 Ω, 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 230 V, 50 Hz in NO SIGNAL mode should be ~400mA.

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.

2. Determine the cause of the problem and correct it.

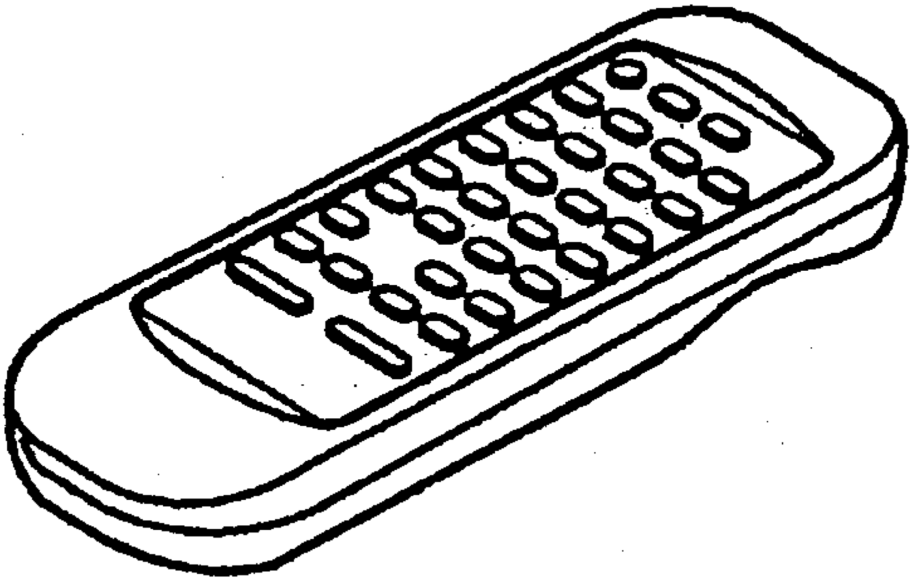
3. Turn on the power once again after one minute.

Note:

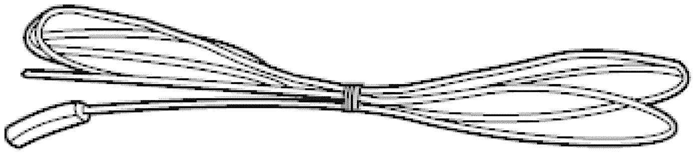
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

3. Accessories

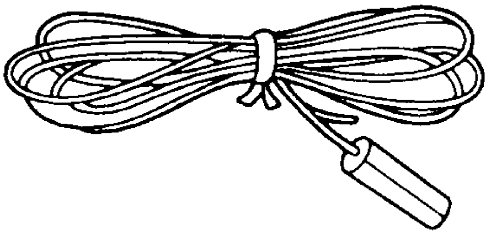
Remote Control Transmitter



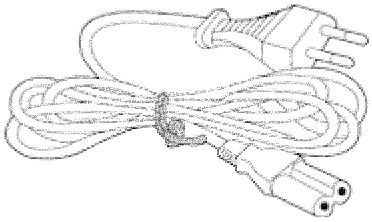
FM indoor antenna (E,EB)



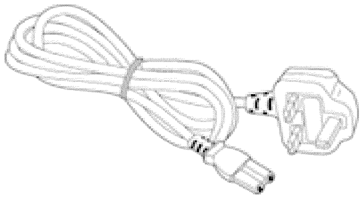
FM indoor antenna (EG)



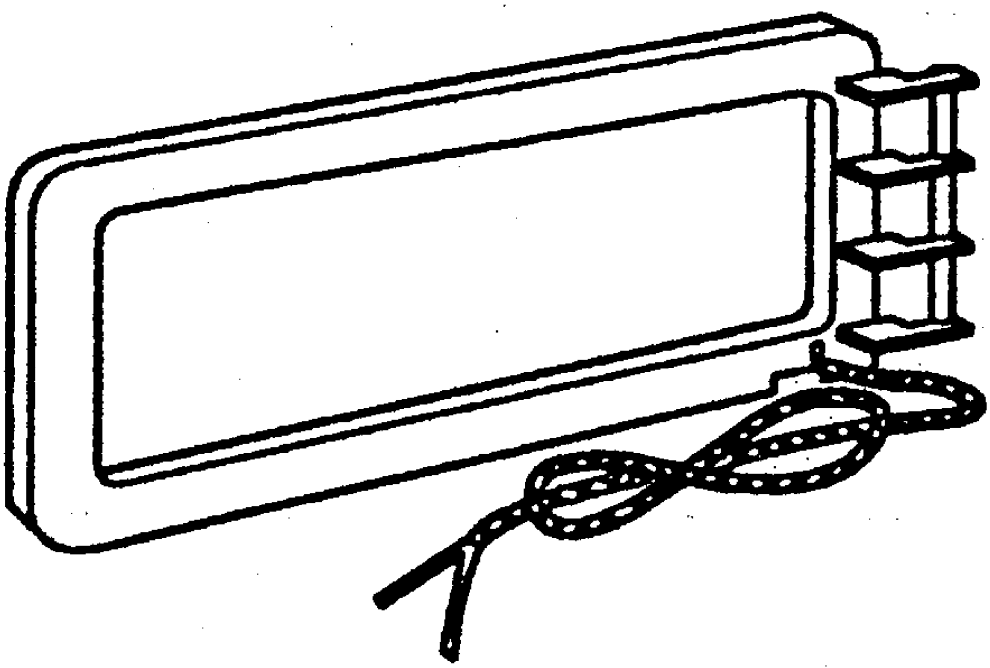
AC mains lead (E,EG)



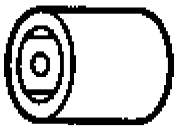
AC mains lead (EB)



AM Loop antenna



Antenna Plug Adaptor (EB)

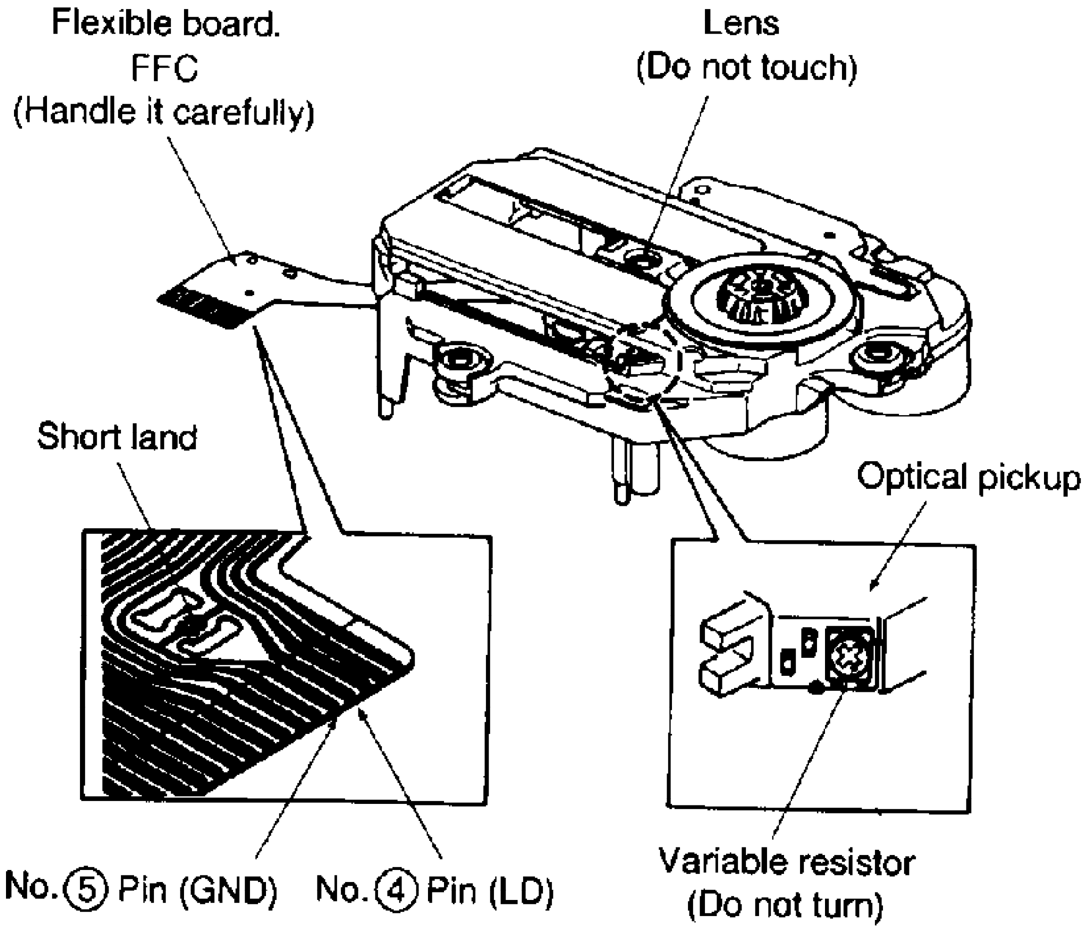


4. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- Handling of traverse deck (optical pickup)

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **The short land between the No.4(LD) and No.5(GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode.To connect to the PC board, be sure to open by removing the solder build-up, and finish the work quickly.**
3. **Take care not to apply excessive stress to the flexible board (FFC).**
4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted.**


Flexible board.
FFC
(Handle it carefully)
Lens
(Do not touch)
Short land
Optical pickup
No.⑤ Pin (GND)
No.④ Pin (LD)
Variable resistor
(Do not turn)

- Grounding for electrostatic breakdown prevention

1. **Human body grounding**

   Use the anti-static wrist strap to discharge the static electricity from your body.

2. **Work table grounding**

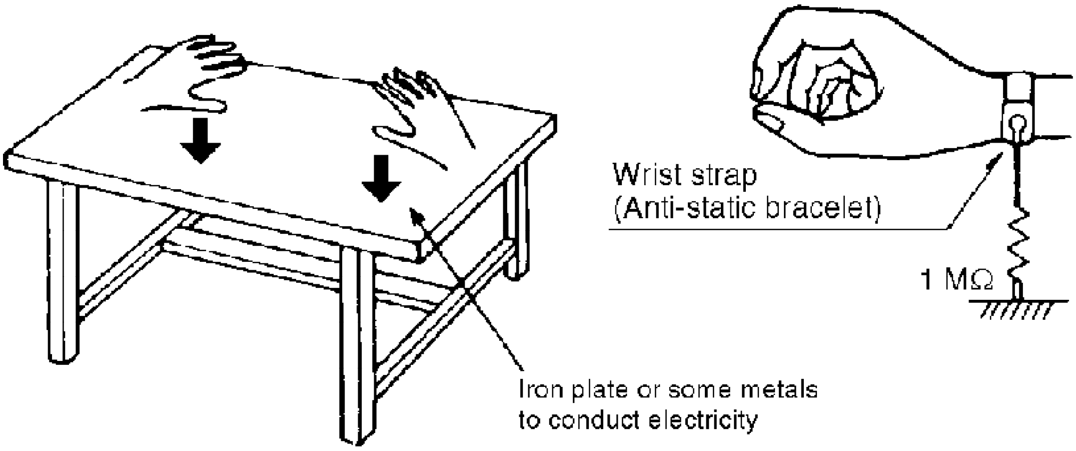
   Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when Replacing the Traverse Deck :

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



5. Precaution of Laser Diode

Caution :

This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens. / Wavelength : 780 nm / Maximum output radiation power from pick up : 100 µW/VDE / Laser radiation from pick up unit is safety level, but be sure the followings:

1. **Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick up lens for a long time.**

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit : 100 µW/VDE / Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

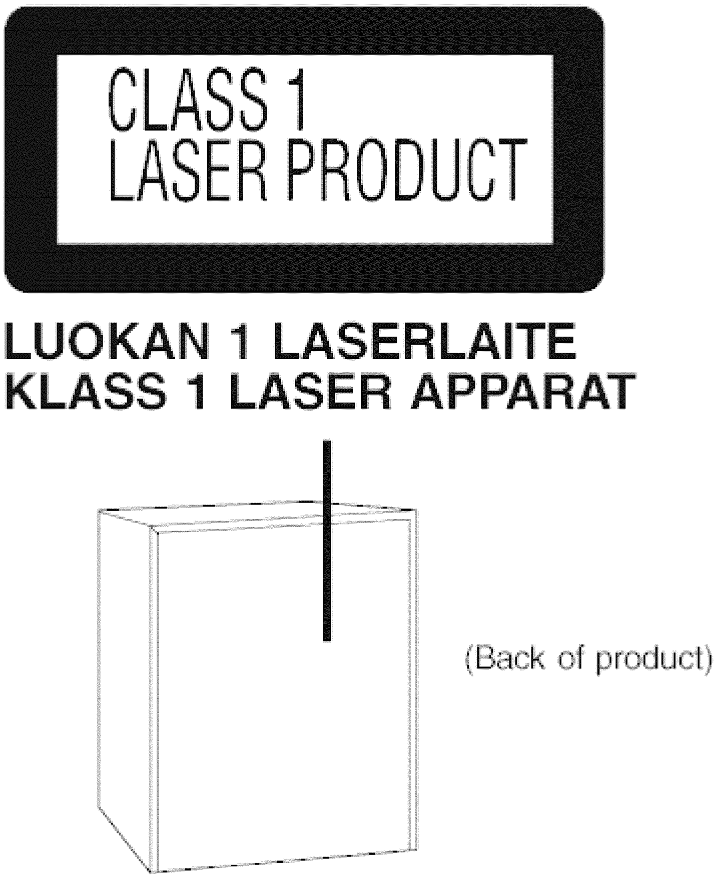
1. **Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.**
2. **Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.**
3. **Nicht mit optischen Instrumenten in die Fokussierlinse blicken.**
4. **Nicht über längere Zeit in die Fokussierlinse blicken.**

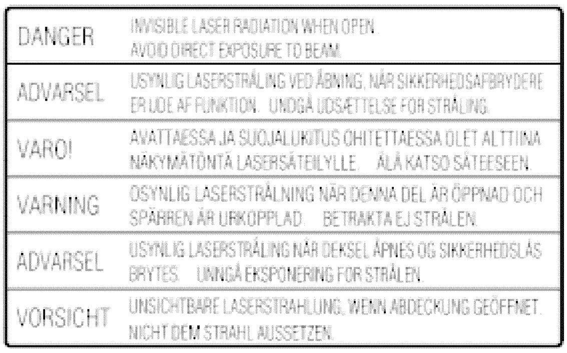
ADVARSEL: I dette a apparat anvendes laser.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ Use of Caution Labels





DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	(Inside of product)
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Indersiden at apparatet)
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen sisällä)
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.	(Apparatens insida)
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets innside)
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	(Im Inneren des Gerätes)

6. Caution for AC Mains Lead

(For "EB" area code model only.)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

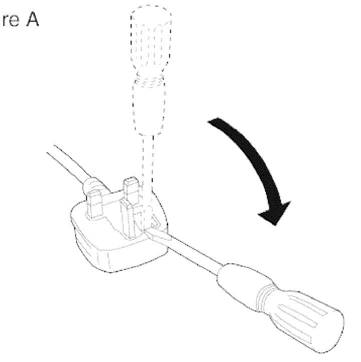
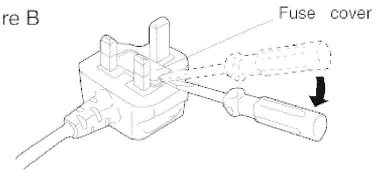


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

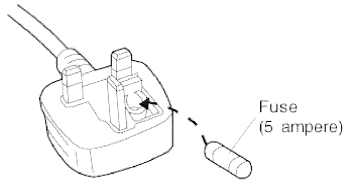
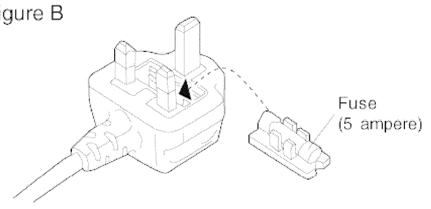
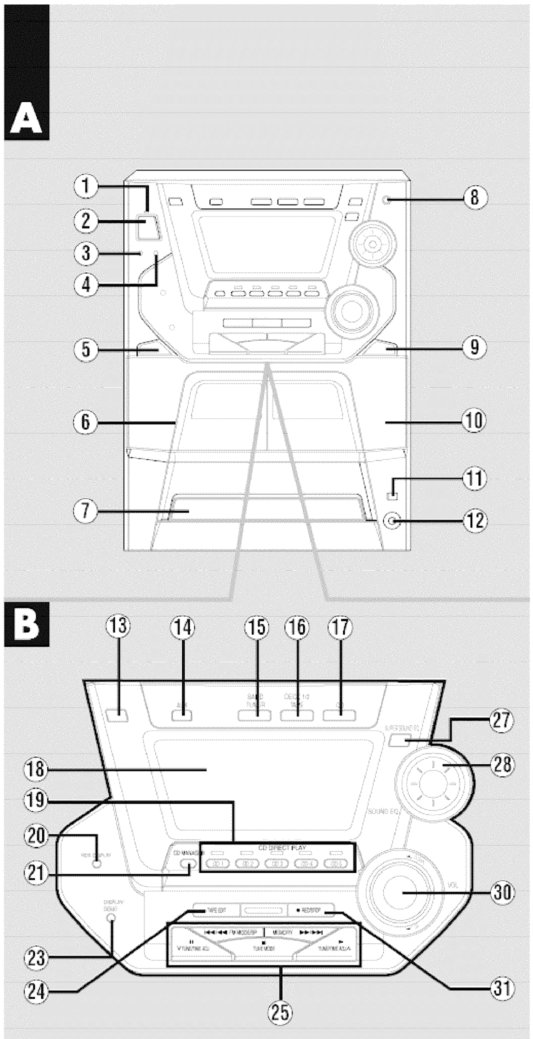


Figure B



7. Operation Procedures



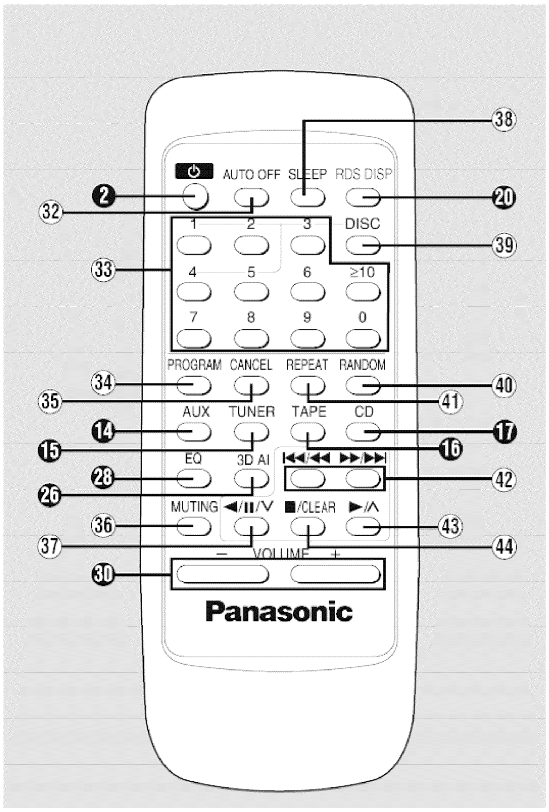
Front panel controls

A Main unit

No.	Name
①	**AC supply indicator (AC IN)** This indicator lights when the unit is connected to the AC mains supply.
②	**Standby/on switch (⏻/I, POWER)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
③	**Play timer/record timer button (⏲PLAY/⏲REC)**
④	**Clock/timer button (CLOCK/TIMER)**
⑤	**Deck 1 open button (⏏ DECK 1 OPEN)**
⑥	**Deck 1 cassette holder**
⑦	**Disc tray**
⑨	**Deck 2 open button (⏏ DECK 2 OPEN)**
⑩	**Deck 2 cassette holder**
⑪	**CD open/close button (⏏, OPEN/CLOSE)**
⑫	**Headphone jack (PHONES)**

B Center console

No.	Name
⑬	**Remote control signal sensor**
⑭	**AUX button (AUX)**
⑮	**Tuner/band select button (TUNER, BAND)**
⑯	**Tape/deck select button (TAPE, DECK 1/2)**
⑰	**CD button (CD)**
⑱	**Display**
⑲	**Disc direct play buttons and indicators (CD 1 ~ CD 5)**
㉑	**CD manager button (CD MANAGER)**
㉓	**Display select/demonstration button (-DISPLAY/–DEMO)**
㉔	**Tape edit button (TAPE EDIT)**
㉕	**Basic operating buttons** Functions change according to the source.
㉗	**Super sound EQ button (SUPER SOUND EQ)**
㉘	**Jog control (SOUND EQ)**
㉚	**Volume control (VOL)**
㉛	**Recording start/stop button (● REC/STOP)**


㊳
AUTO OFF
SLEEP
RDS DISP
❷
⓴
㉜
DISC
㊴
㉝
1
2
3
4
5
6
≥10
7
8
9
0
PROGRAM
CANCEL
REPEAT
RANDOM
㉞
㊵
㉟
㊶
AUX
TUNER
TAPE
CD
⓮
⓱
⓯
⓰
EQ
3D AI
I◀◀/◀◀ ▶▶/▶▶I
㉘
㊷
㉖
MUTING
◀/❚❚/∨
■/CLEAR
▶/∧
㊱
㊸
㊲
㊹
㉚
– VOLUME +
Panasonic

Front panel controls

Remote control

Buttons such as ❷ functions in exactly the same way as the buttons on the main unit.

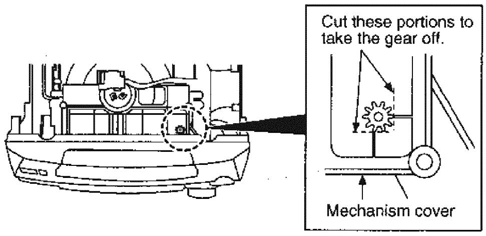
No.	Name
㉜	Auto off button (AUTO OFF)
㉝	Numeric buttons (≥10, 1–9, 0)
㉞	Program button (PROGRAM)
㉟	Cancel button (CANCEL)
㊱	Muting button (MUTING)
㊲	Pause/preset channel select button (❚❚/∨)
㊳	Sleep button (SLEEP)
㊴	Disc button (DISC)
㊵	Random button (RANDOM)
㊶	Repeat button (REPEAT)
㊷	Skip/search buttons (I◀◀/◀◀, ▶▶/▶▶I)
㊸	Play/preset channel select button (▶/∧)
㊹	Stop/program clear button (■/CLEAR)

8. Disassembly and Main Component Replacement Procedures

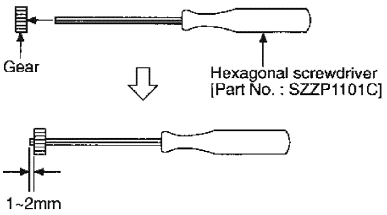
Gear for servicing (jig) information

1. This unit has a gear which is used for checking items (Open/close of disc tray, up/down operation of traverse unit by manually) when servicing.
2. For preparation of gear (for servicing), Perform the procedures as follows.
3. In case of re-servicing the same set, the "gear for servicing" may has been taken off because it has been used. The "gear for servicing" must be stored.

1. Remove the gear provided with mechanism cover as shown below.


Cut these portions to take the gear off.
Mechanism cover

2. Insert the hexagonal screwdriver (2mm) into the gear, and then project the tip of screwdriver for 1~2mm in length.


Gear
Hexagonal screwdriver
[Part No. : SZZP1101C]
1~2mm

“ATTENTION SERVICER”

Some chassis components may have sharp edges.
Be careful when disassembling and servicing.

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

2. **For reassembly after operation checks or replacement, reverse the respective procedures.**
   Special reassembly procedures are described only when required.
3. **Select items from the following index when checks or replacement are required.**

Contents

- Disassembly and assembly main unit
  1. Checking of the Main, Panel and Deck P.C.B.
  2. Checking of the Power P.C.B.
- Main Component Replacement Procedures
  1. Replacement of the Traverse Deck.
  2. Replacement of the Power Amplifier IC.
- Disassembly and assembly of the Traverse Unit
- Disassembly and assembly of the Disc Tray

Warning:

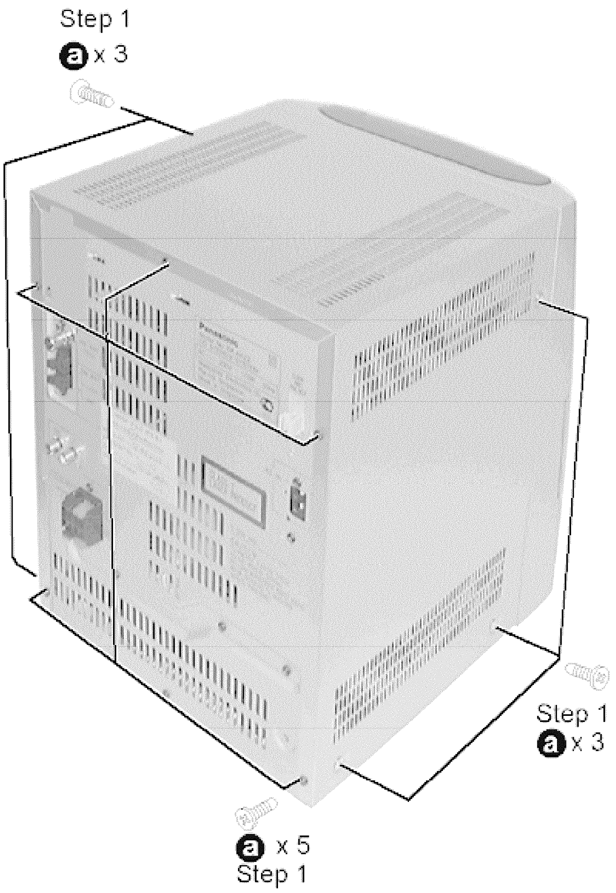
This product uses a laser diode. Refer to caution statement Precaution of Laser Diode.

ACHTUNG:

Die Lasereinheit nicht zerlegen.
Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

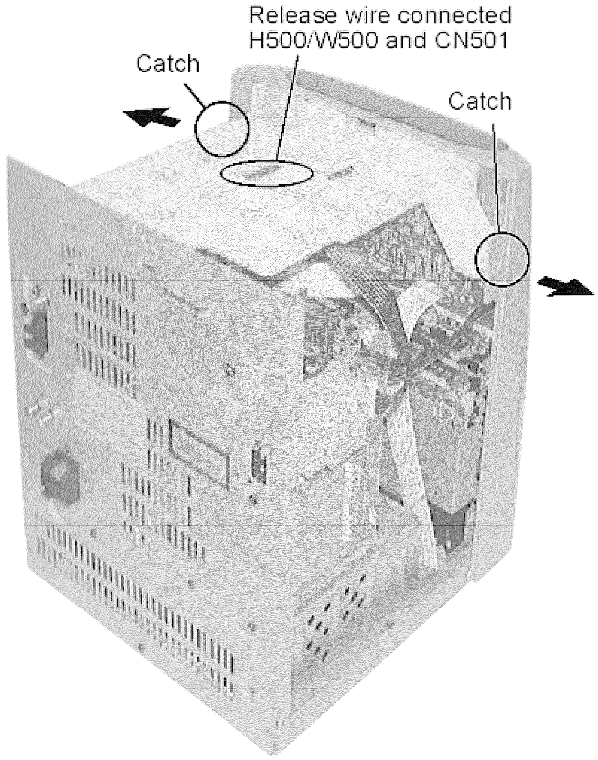
8.1. Disassembly Procedure For Each Major P.C.B. checking

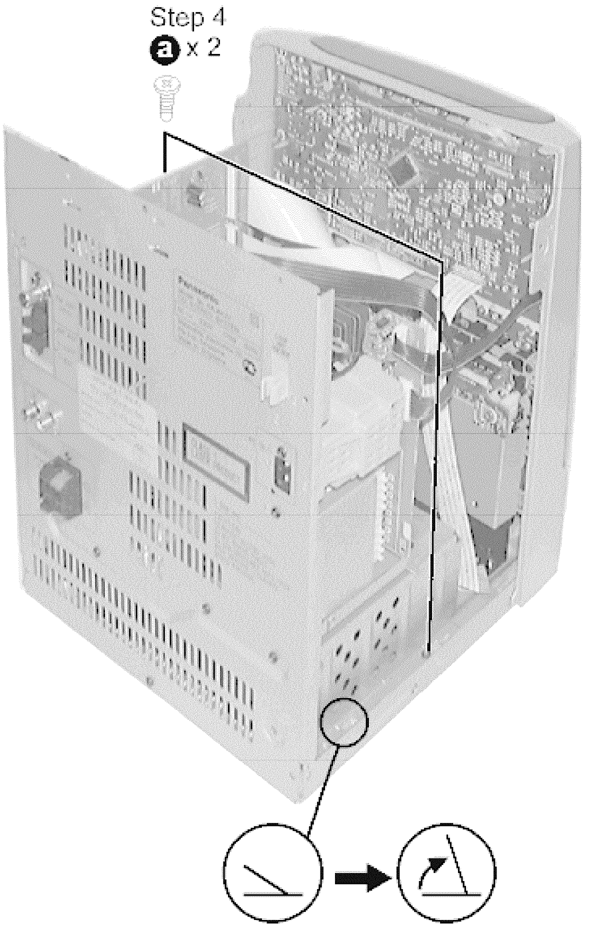
8.1.1. Checking of the Main, Transformer, Panel and Deck P.C.B.


Step 1
ⓐ x 3
Step 1
ⓐ x 3
ⓐ x 5
Step 1

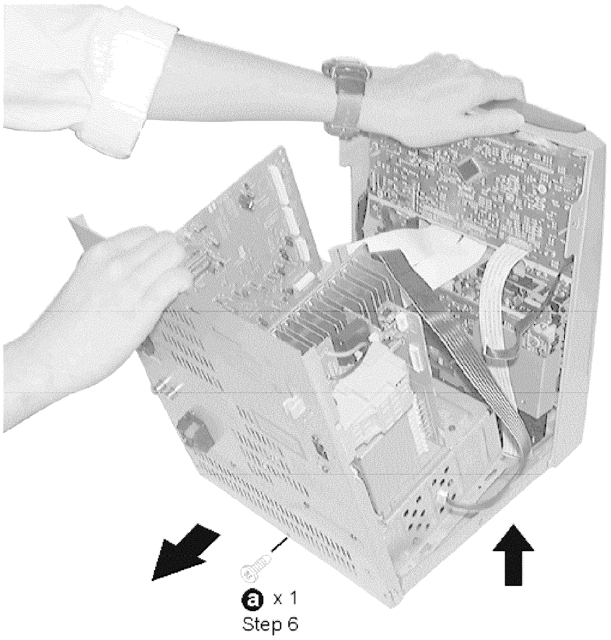
Step 2 Remove the top cabinet.

Step 3 Remove the T-bracket.

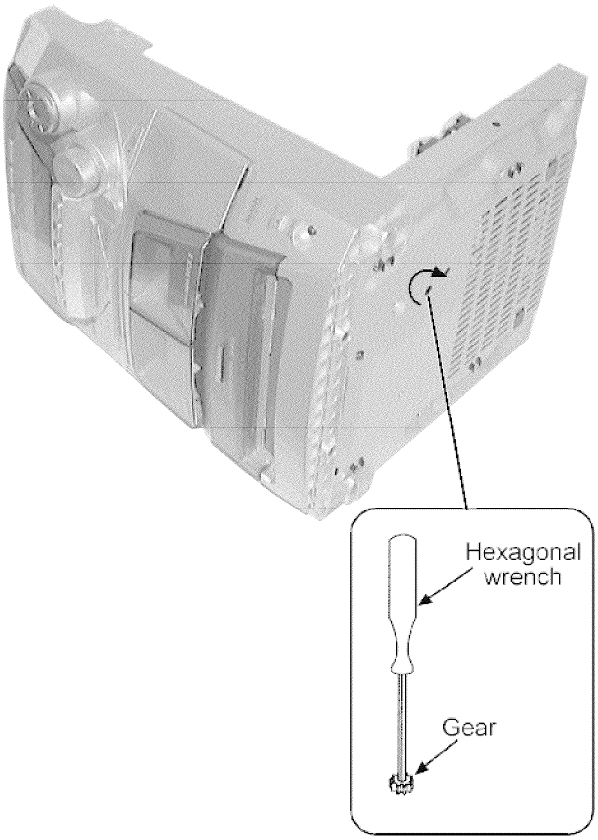

Release wire connected
H500/W500 and CN501
Catch
Catch



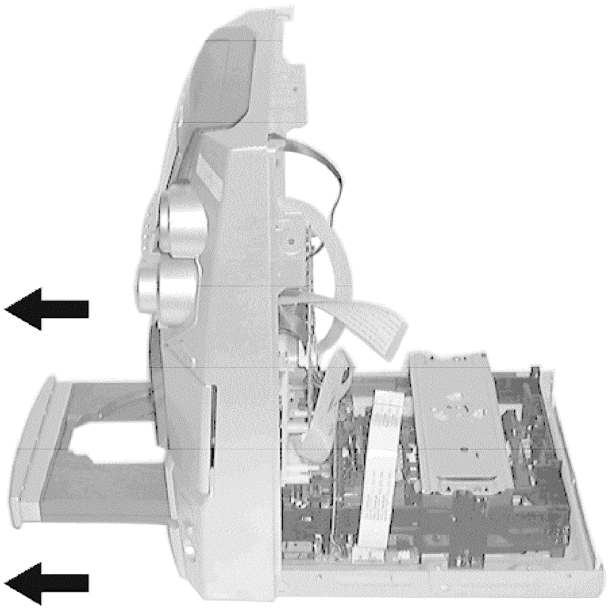
Step 5 Turn locating pin on both sides 90°. (Locating pin need not to be bent back.)



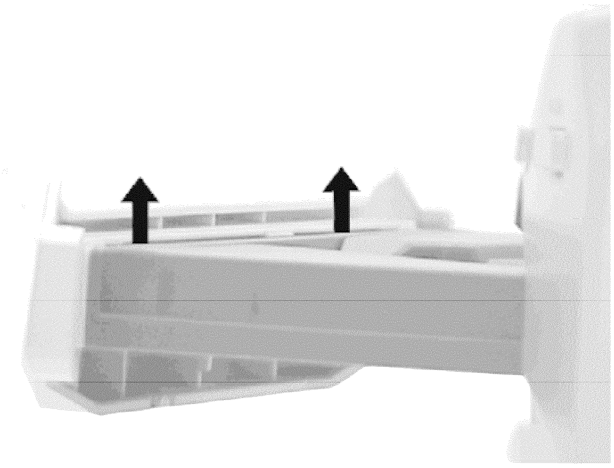
Step 6 Release the wires CN302, CN303, CN304, CN309 and CN502. Remove rear panel by pulling it backward and lift the rear panel assembly.


Hexagonal wrench
Gear

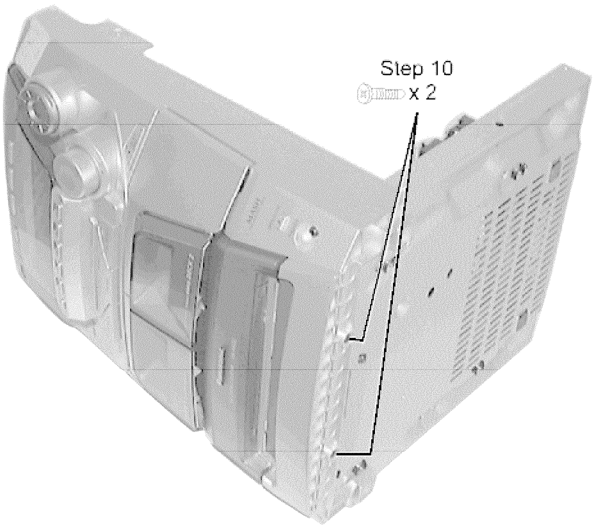
Step 7 Use a hexagonal wrench and turn clockwise to release the tray.

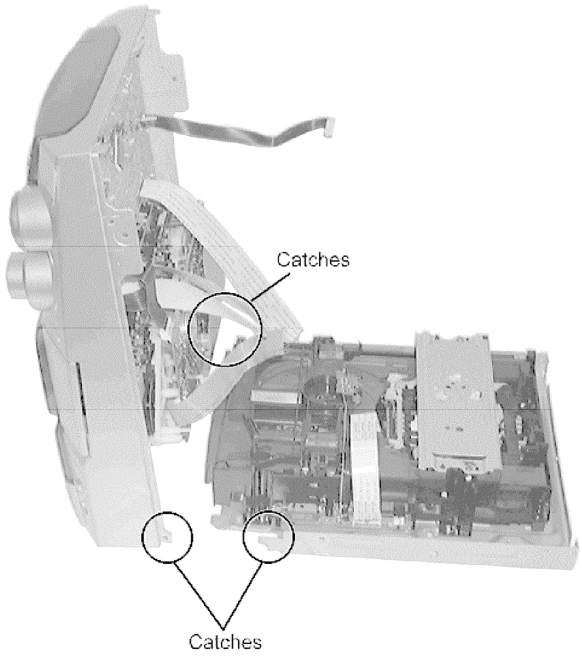


Step 8 Pull the CD tray in the direction shown above.

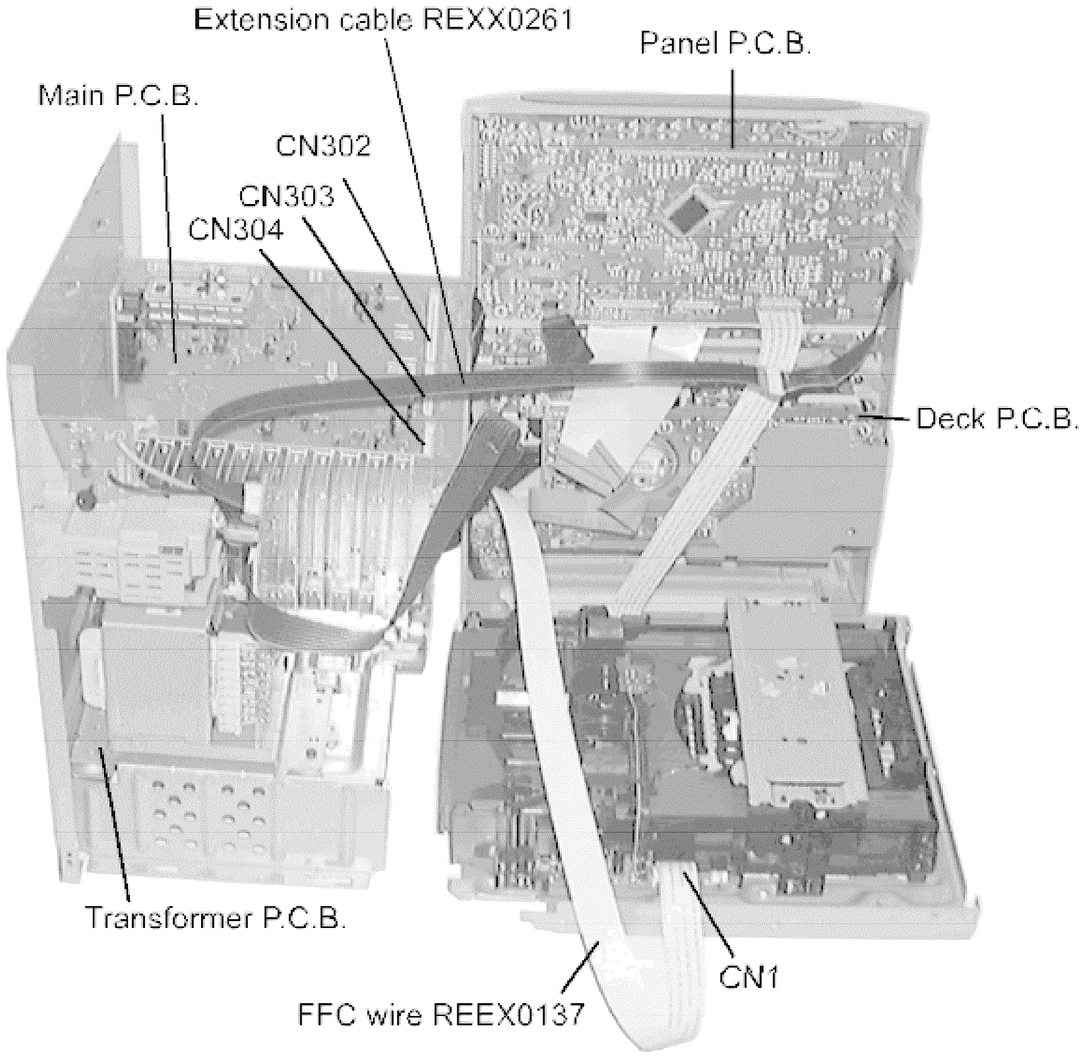


Step 9 Remove the CD lid in the direction of the arrow.



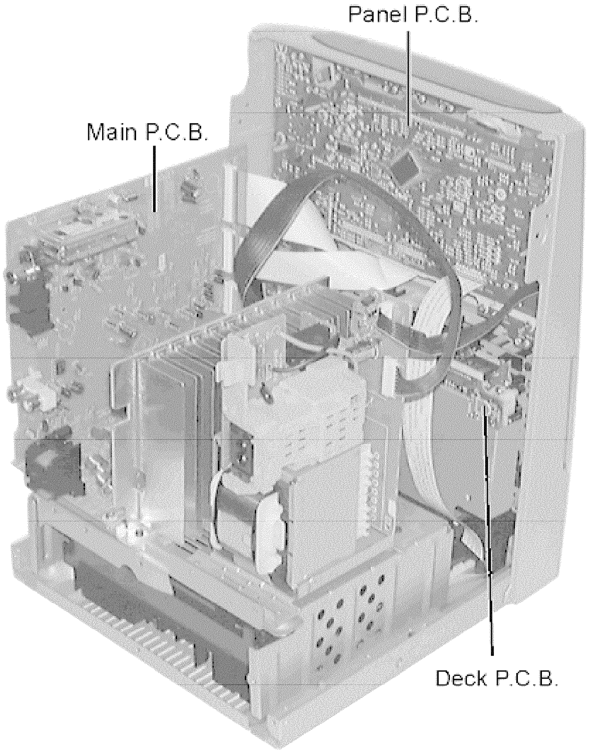

Catches
Catches

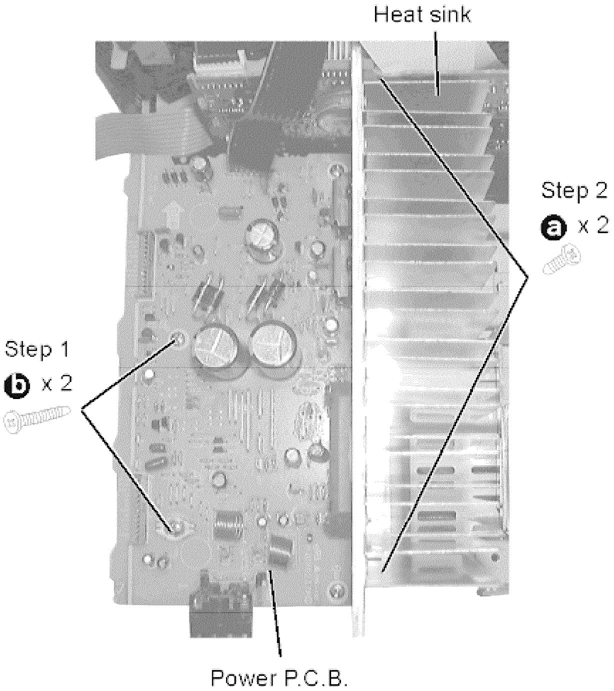
Step 11 Release the two catches shown above to remove the front cabinet from the CD traverse unit.


Extension cable REXX0261
Panel P.C.B.
Main P.C.B.
CN302
CN303
CN304
Deck P.C.B.
Transformer P.C.B.
CN1
FFC wire REEX0137

Step 12 Connect back the wire to CN302, CN303 and CN304. Use the extension wire (REXX0261) to connect to CN502. Use a FFC wire (REEX0137) to connect CN1 to CN309.

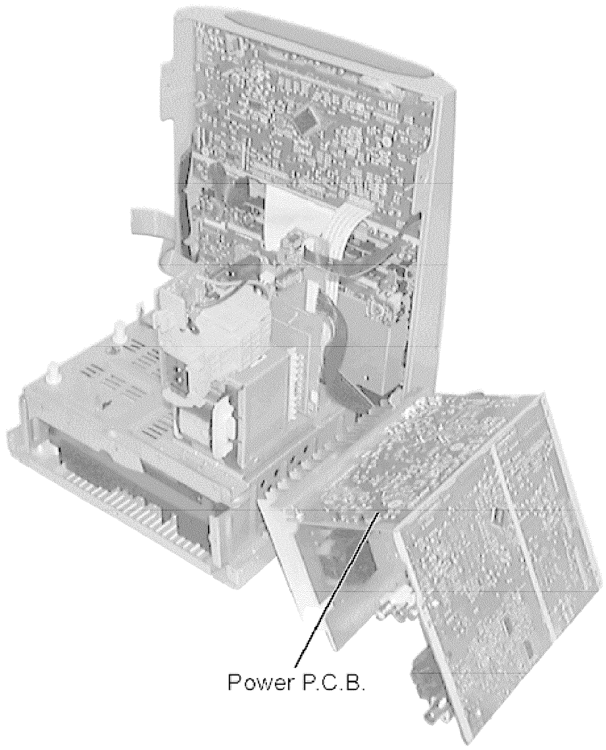
8.1.2. Checking for Panel, Main and Deck P.C.B.


Panel P.C.B.
Main P.C.B.
Deck P.C.B.


Heat sink
Step 2
a x 2
Step 1
b x 2
Power P.C.B.

Step 1 Remove 2 screws each side.

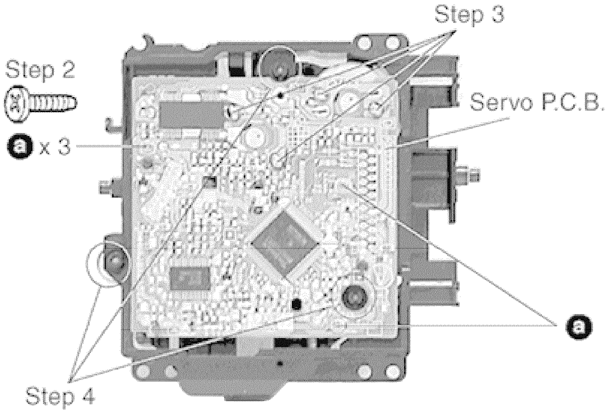
8.1.3. Checking for Power P.C.B.

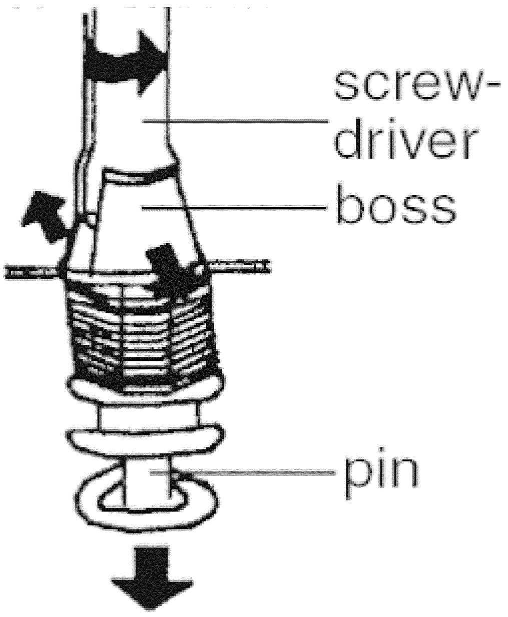


8.2. Main Component Replacement Procedures

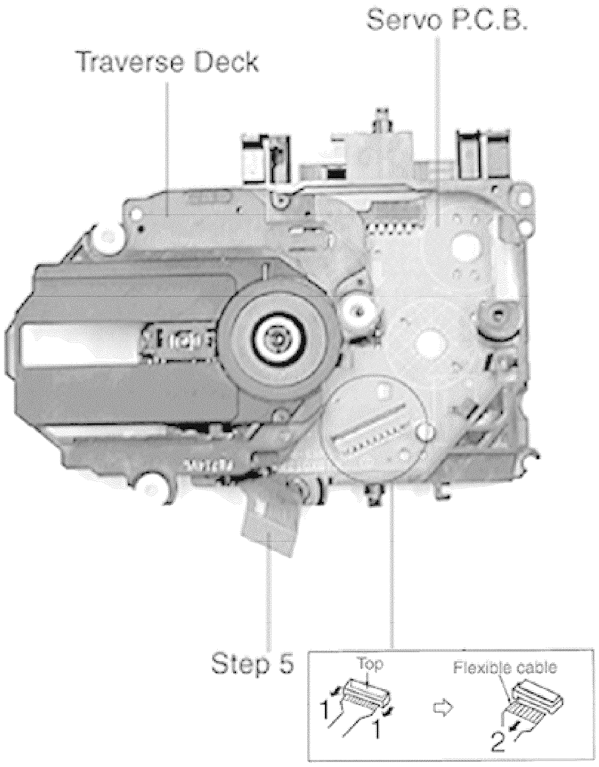
1. Replacement of the Traverse Deck

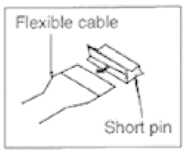
Step 1 Follow the procedures in ‘Disassembly of the Traverse Unit’ (Step 1 - Step 4)


Step 3
Step 2
a x 3
Servo P.C.B.
a
Step 4


screw-
driver
boss
pin

Step 3 Desolder the 4 legs of the 2 motors and pull out the Servo P.C.B.
Step 4 Widen the 3 bosses with a flat screwdriver and pull out the 3 pins. Then remove the Traverse Deck.


Servo P.C.B.
Traverse Deck
Step 5
Top
Flexible cable
1
1
2


Flexible cable
Short pin

Step 5 Remove the flexible cable CN 701.

- Removal of the flexible cable. Push the top of the connector in the direction of the arrow 1, and then pull out the flexible cable in the

direction of the arrow 2.

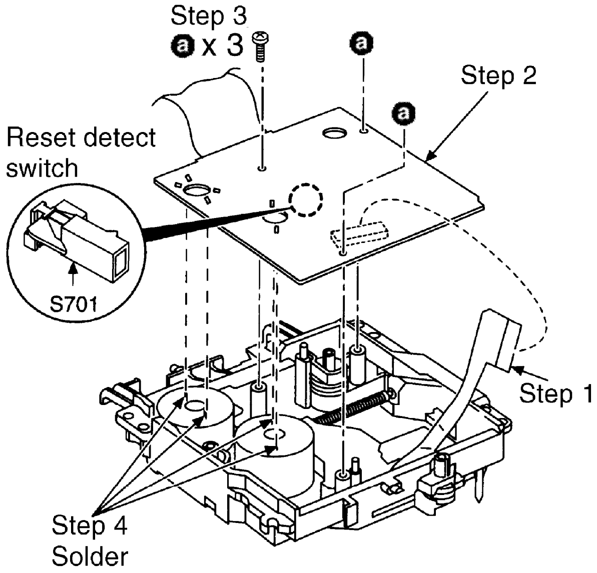
Note:

Insert a short pin into the flexible cable for traverse unit.

- Installation of the CD servo P.C.B. after replacement

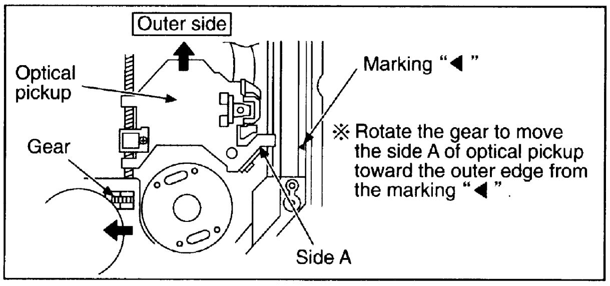
Step 1 Connect the FFC board.

Step 2 Install the CD servo P.C.B. in the traverse deck assembly.


Step 3
ⓐ x 3
ⓐ
ⓐ
Step 2
Reset detect switch
S701
Step 1
Step 4
Solder

Note:

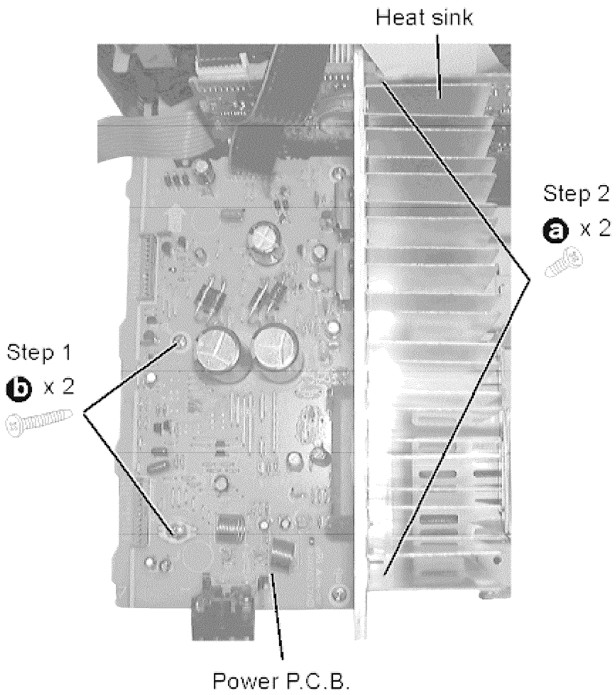
Before installing the CD servo P.C.B., move the optical pickup towards the outer edge from the marking (black triangle). [Otherwise, the reset detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]


Outer side
Optical pickup
Gear
Marking "◀ "
Side A

※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀ ".

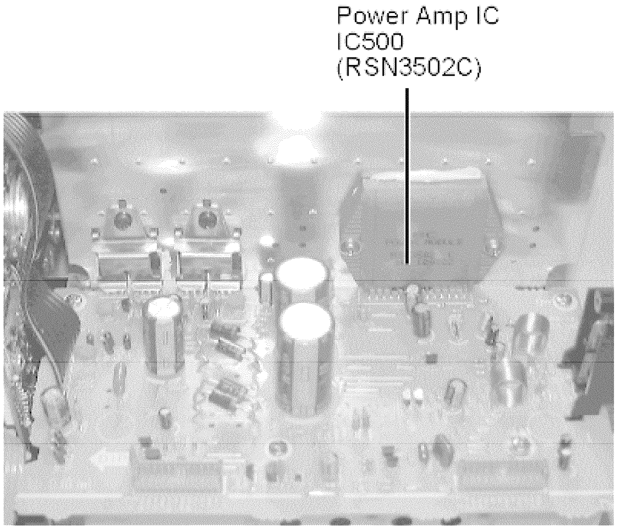
2. Replacement of the Power Amplifier IC

Step 1 Follow the procedures in ‘Checking Procedure for each major P.C.B.’ (Step 1 - Step 4).

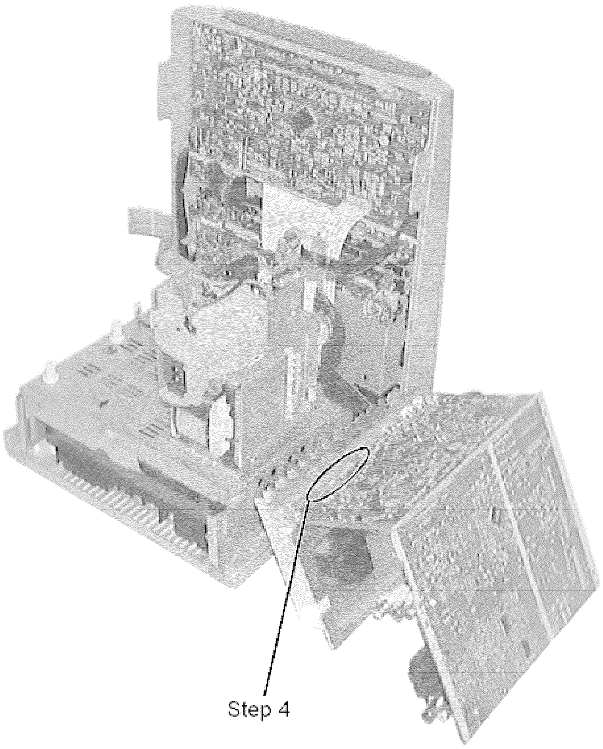

Heat sink
Step 2
a x 2
Step 1
b x 2
Power P.C.B.

Step 2 Remove the wires at CN302, CN303 and CN304 and pull out the Main P.C.B.

Step 3 Remove 4 screws fixed to the Power Amplifier IC.


Power Amp IC
IC500
(RSN3502C)

Step 4 Unsolder the terminals of Power Amp IC and replace the respective component.

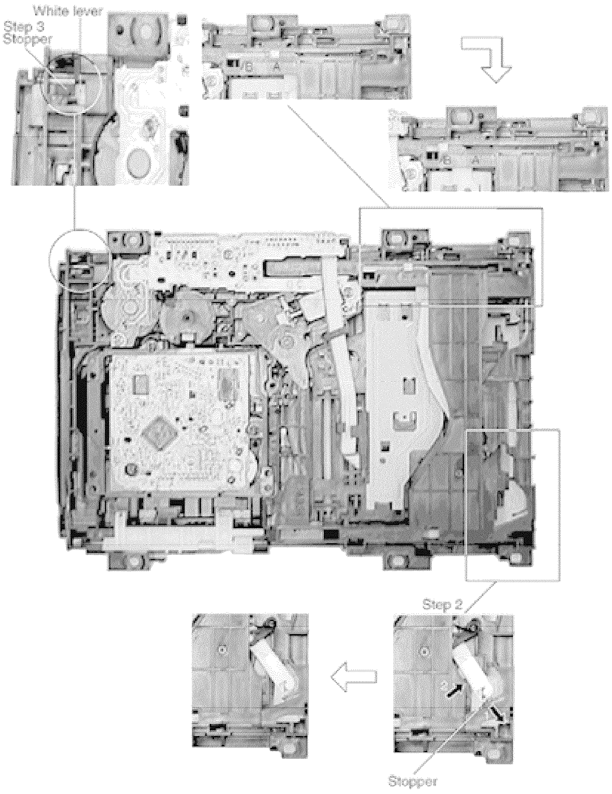


8.3. Disassembly and assembly of the Traverse Unit

Step 1 Push the lever from position A to B.

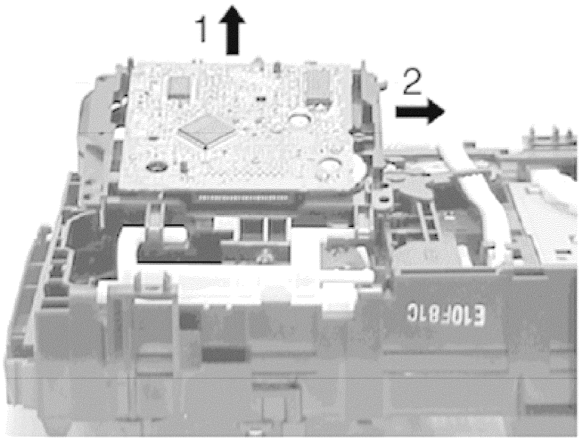
Step 2 Pull the stopper (black) in the direction of arrow 1 and push the lever in the direction of arrow 2.

Step 3 Push the stpeer (black) down until the white lever eject out.

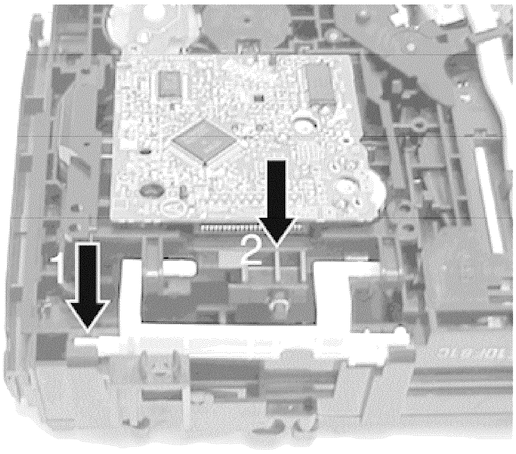

White lever
Step 3
Stopper
B
A
B
A
Step 2
Stopper

Step 4 Lift up the traverse unit and slide out the unit as shown.

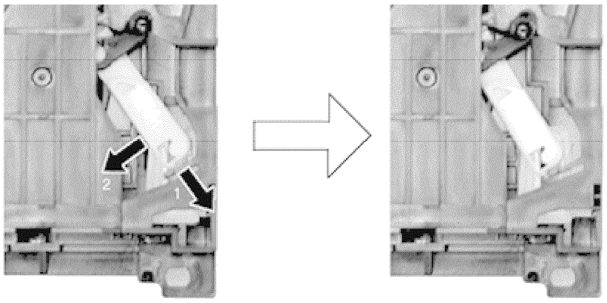
- Replacement of Traverse Unit



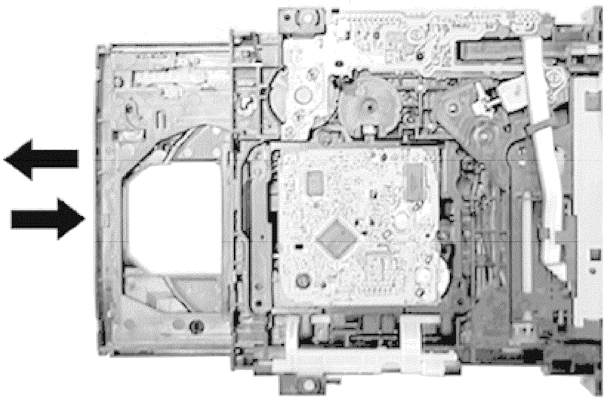
Step 1 Place the traverse unit as shown.
Step 2 Press in the lever shaft in the direction of arrow 1 as shown and push the traverse unit into the position in the direction of arrow 2.



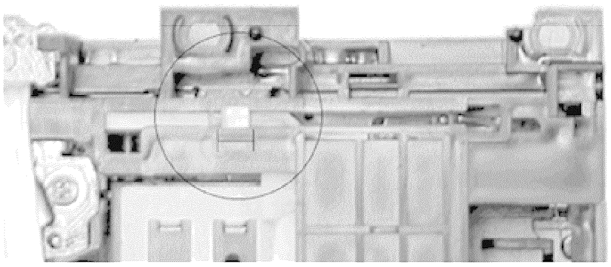
Step 3 Pull the stopper in the direction of arrow 1 and release the lever in the direction of arrow 2 as shown.



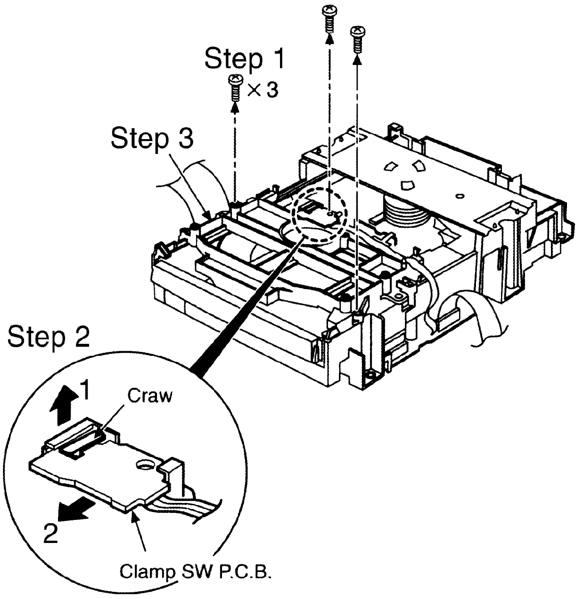
Step 4 Pull out the tray half way and push it back fully.



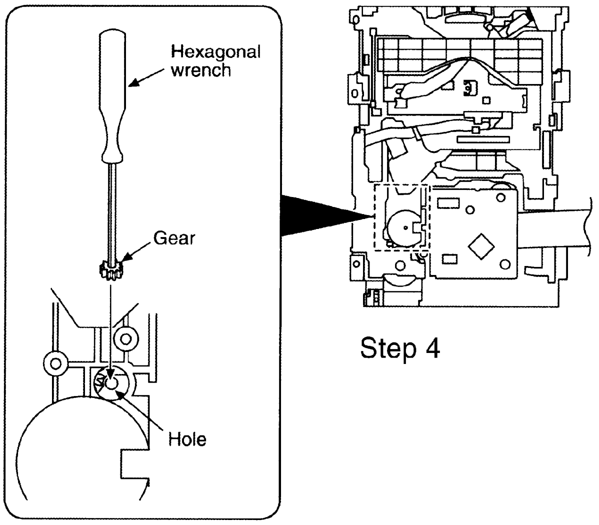
Step 5 Push the lever to the initial position indicated ‘I---I’.



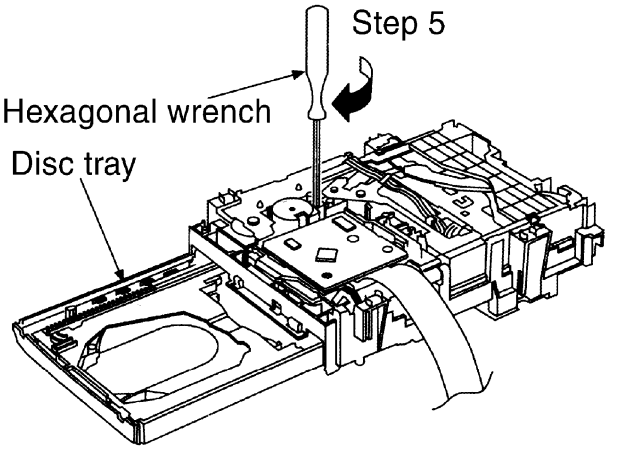
8.4. Disassembly and assembly of the Disc Tray


Step 1
×3
Step 3
Step 2
1
Craw
2
Clamp SW P.C.B.

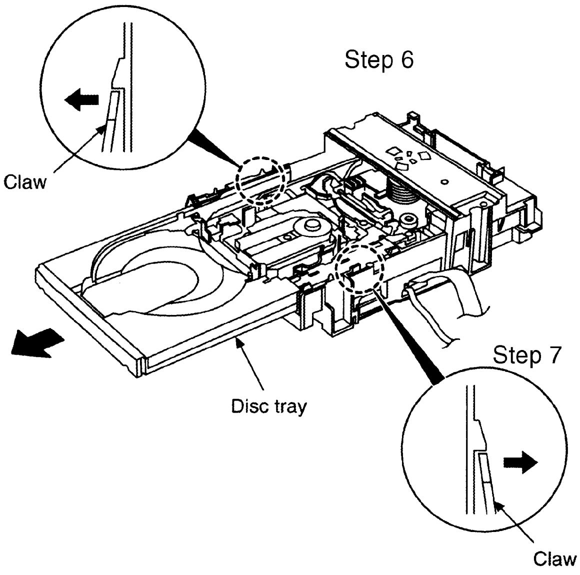
Step 2 With lifting the claw in the direction of arrow 1, draw the clamp SW P.C.B. in the direction of arrow 2.
Step 3 Remove the mechanism cover.


Hexagonal wrench
Gear
Hole
Step 4

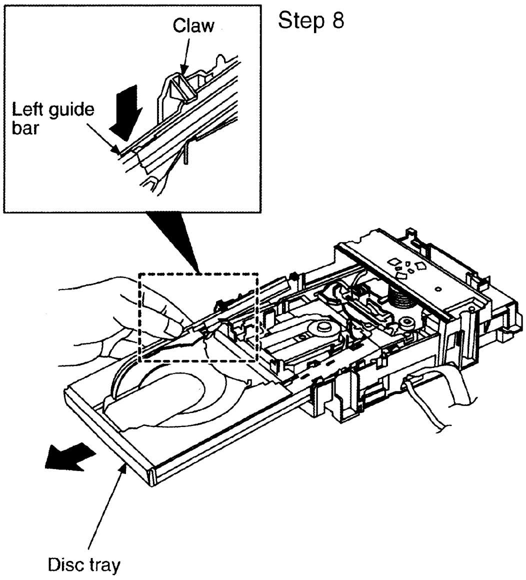
Step 4 Insert the gear with hexagonal wrench into the hole.


Step 5
Hexagonal wrench
Disc tray

Step 5 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

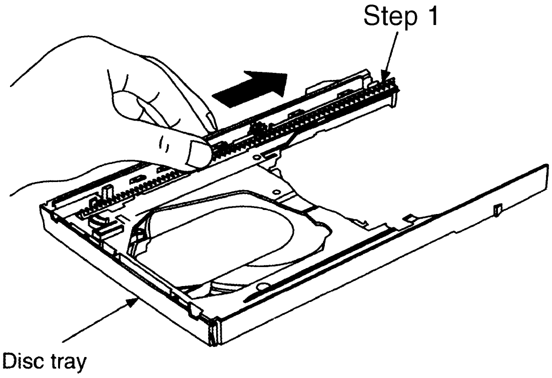

Step 6
Claw
Disc tray
Step 7
Claw

Step 6 Upset the CD changer unit again.
Step 7 Release both the claws, and then draw the disc tray.

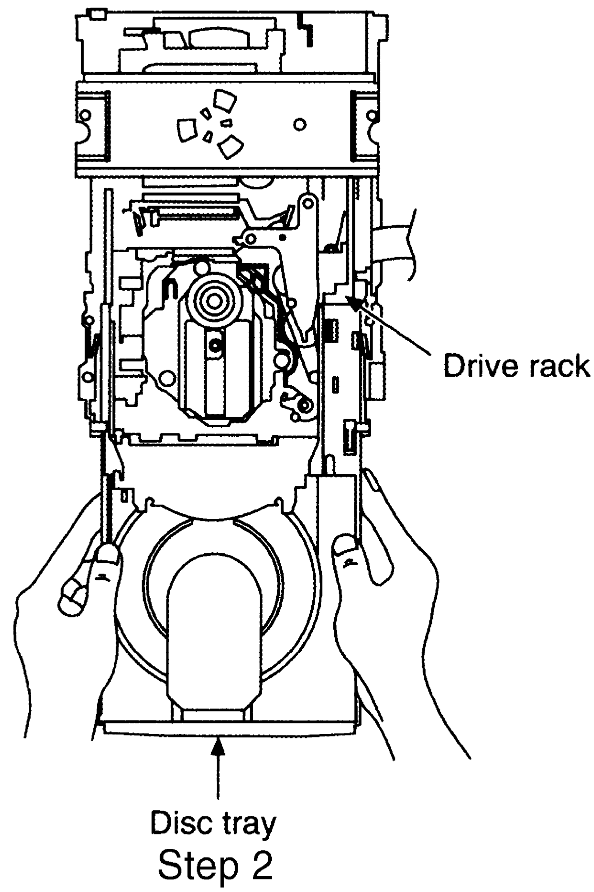

Claw
Step 8
Left guide bar
Disc tray

Step 8 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

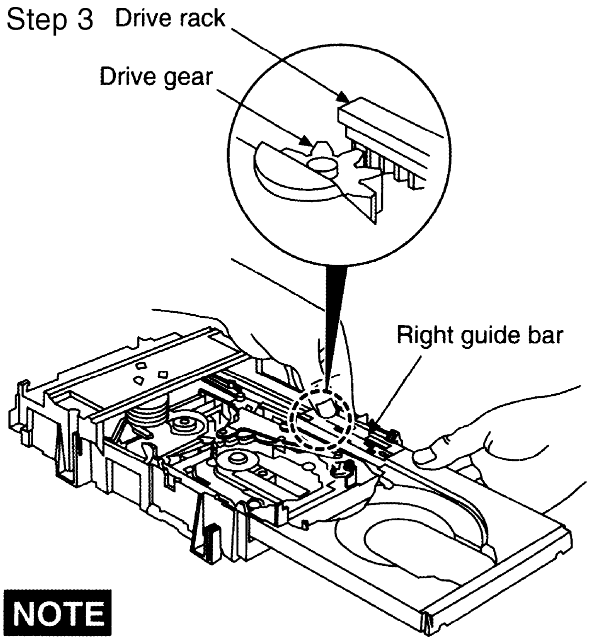
- Installation of the disc tray after replacement


Step 1
Disc tray

Step 1 Slide the drive rack fully in the direction of arrow.


Drive rack
Disc tray
Step 2

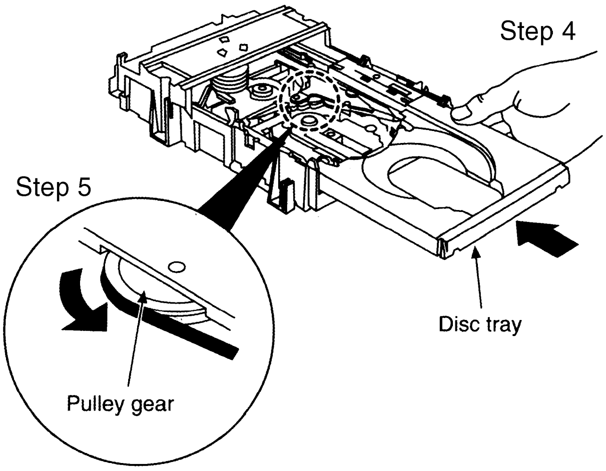
Step 2 Holding the drive rack not to move, install the disc tray.


Step 3
Drive rack
Drive gear
Right guide bar

NOTE

Force the right guide bar of tray base
manually not to move upwards.

Step 3 Align the drive rack with the driver gear.



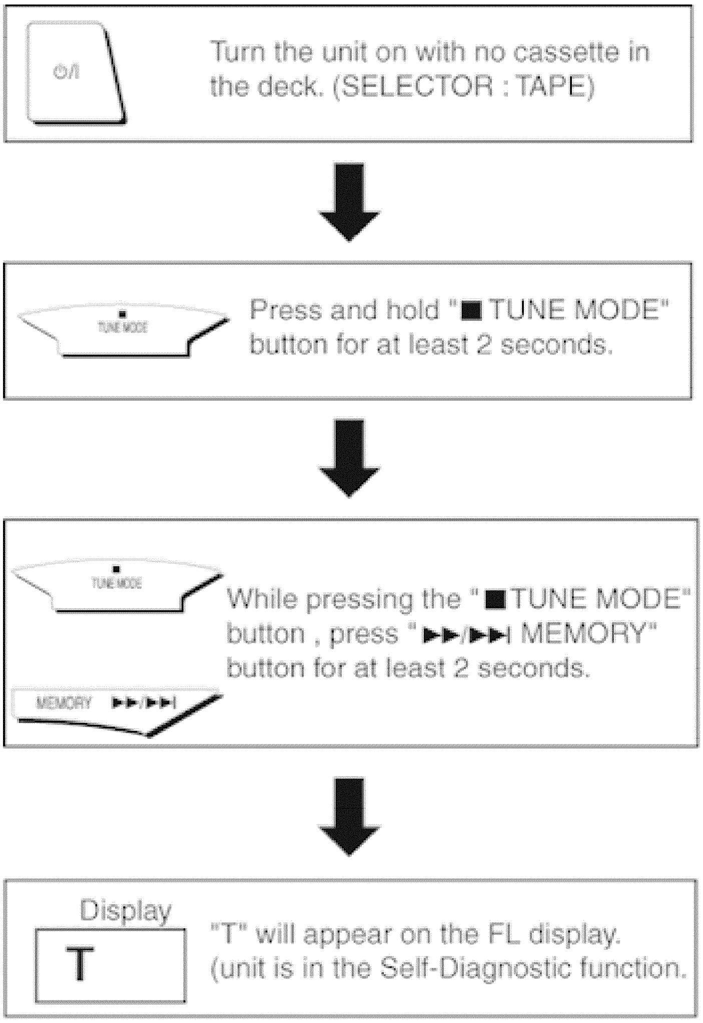
Step 4 Holding the disc tray manually, rotate the pulley gear in the direction of arrow.
Step 5 Rotate the gear 5 or 6 times manually, and then push the disc tray.

9. Self-Diagnostic Function

9.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.
Use this function when performing maintenance on the unit.

9.2. How to enter the Self-Diagnostic Function



Turn the unit on with no cassette in the deck. (SELECTOR : TAPE)

Press and hold "■ TUNE MODE" button for at least 2 seconds.

While pressing the "■TUNE MODE" button , press "▶▶/▶▶I MEMORY" button for at least 2 seconds.

"T" will appear on the FL display. (unit is in the Self-Diagnostic function.

9.3. Cassette Mechanism Test (For error code H01, H02, H03, F01, F02)

1. Press “TAPE, DECK 1/2” to select Deck 2.

2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.

3. Press “FAST FORWARD MEMORY” (Tape will be stop after 2 seconds)

4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.

5. Press “REVERSE FM MODE/BP” (Tape will be stop after 2 seconds)

6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.

7. Press “PLAY/TUNE/TIME ADJ UP” (After TPS function, tape will stop automatically)

8. Press “REC/STOP” (Tape will not move)

9. Press “STOP/TUNE MODE” to indicate Error code.

- If several problem exist, error code will change each time when “ ■ /TUNE MODE” is pressed.
  (e.g. H01 → H03 → F01 .....etc.)

10. Press “TAPE, DECK 1/2” to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

9.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, H15)

1. Press “CD”.
2. Press “OPEN/CLOSE (1)” and place a CD.
3. Press “OPEN/CLOSE (1)” to close the tray.
4. Press “OPEN/CLOSE (5)” and wait until the tray is open.
5. Press “OPEN/CLOSE (1)” and remove the CD.
6. Press “OPEN/CLOSE (1)” to close the tray.
7. Press “ ■ /TUNE MODE” to indicate Error Code.

- If several problem exist, error code will change each time when “ ■ /TUNE MODE” is pressed. (e.g. F15 → F26 → F16 ....etc).

9.5. To clear all Error code

1. Press “STOP/TUNE MODE” button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

9.6. How to get out from Self-Diagnostic function

1. Press “Power” button OFF.

9.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

10. Description of Error Code

10.1. Error detection for Cassette Mechanism block

No.	Error	Error Display	Problem condition
1	MODE SW detection error	H01	Faulty operation of cassette mechanism. Faulty contact or short-circuit of mechanism mode switch (S951, S971).
2	REC INH SW detection error	H02	Recording not possible. Faulty contact or short-circuit of REC INH switch (S974, S975).
3	HALF SW detection error	H03	Playback cannot perform. Faulty contact or short-circuit of HALF siwtch (S952, S972).
4	Reel Pulse detection error	F01	The tape advances slightly and then stops. Faulty reel pulse, faulty hole detect IC (IC951, IC971).
5	TPS abnormal	F02	Cassette deck will not perform TPS function. Faulty playback EQ/recording amplifier IC (IC101).

10.2. Error detection for CD/Changer block

No.	Error	Error Display	Problem condition
1	REST SW detection error	F15	CD does not function. This error occurs when the Optical Pick Up REST SW (S701) is not detected within the specified time (about 8 seconds)
2	CD tray opens automatically	F16	CLAMP switch (S4) NG (Check & Replace)
3	Does not startup when [PLAY] button is pressed	F17	BOTTOM switch (S5) NG (Check & Replace)
4	Transmission error between CD servo LSI and micon	F26	CD does not function. This error occurs when the POWER is ON for the CD block and an error is detected after the transmission has started.
5	Startup fails even when you insert CD or the selected disc tray does not open	F27	Tray 1 detect switch or Tray 2 detect switch NG (Check & Replace)
6	Cannot insert CD	F28	Tray 1 detect switch NG (Check & Replace)
7	Cannot eject CD	F29	Check if disc is stuck. Tray 2 detect switch NG (Confirm & Replace)
8	The CD tray closes	H15	CD disc tray detect switch NG (S3) (Check & Replace)

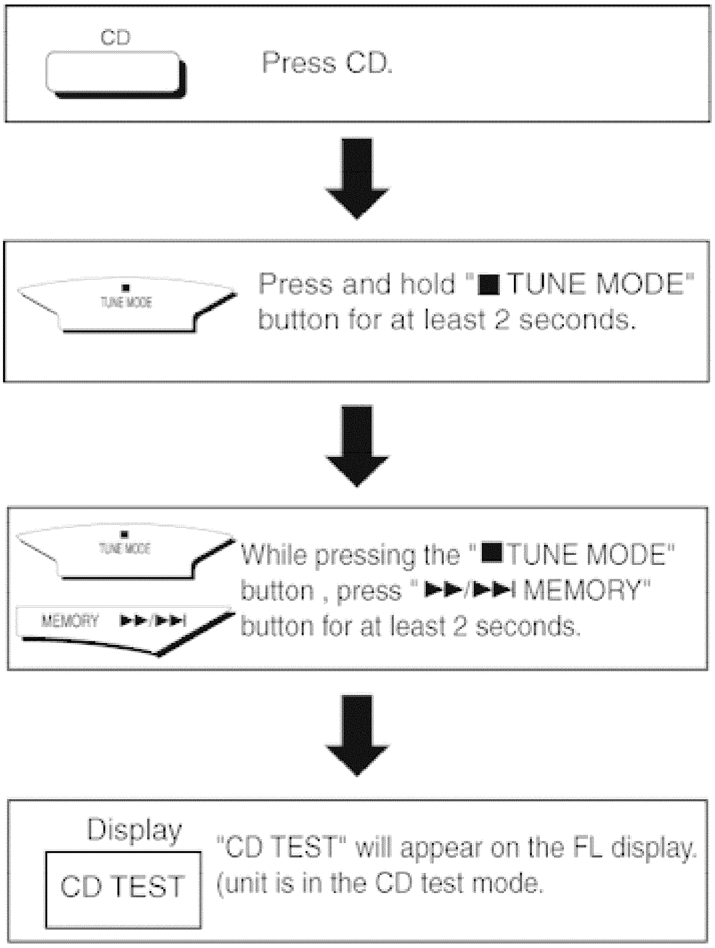
10.3. Power Supply related error detection

No.	Error	Error Display	Problem condition
1	POWER AMP output abnormal	F61	When POWER is switched on, power become off automatically. During normal operation, if DC DET become L, PCNT shall become L and the error display on the left shall be displayed. (IC501)

11. CD Test Mode Function

This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

11.1. How to set CD test mode



Press CD.

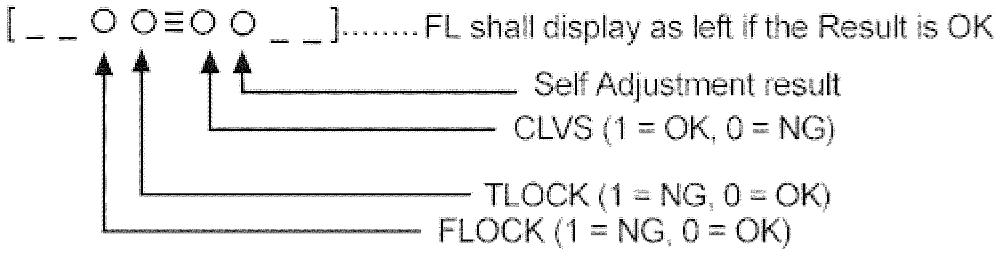
Press and hold "■ TUNE MODE" button for at least 2 seconds.

While pressing the "■TUNE MODE" button , press " ▶▶/▶▶I MEMORY" button for at least 2 seconds.

"CD TEST" will appear on the FL display. (unit is in the CD test mode.

11.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key ‘0’ on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:


[_ _ O O≡O O _ _]........FL shall display as left if the Result is OK
Self Adjustment result
CLVS (1 = OK, 0 = NG)
TLOCK (1 = NG, 0 = OK)
FLOCK (1 = NG, 0 = OK)

During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

12. Measurements and Adjustments

12.1. Cassette Deck Section

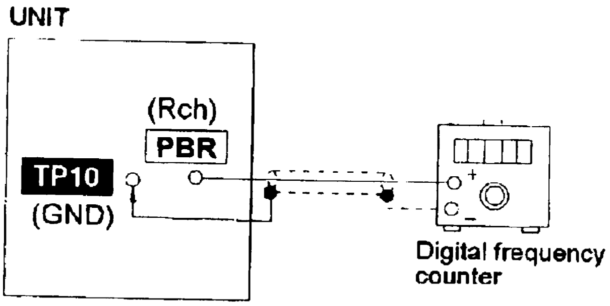
- **Measurement Condition**
- **Tape edit: NORMAL**
- **Record timer: OFF**
- **Make sure head, capstan and press roller are clean.**
- **Judgeable room temperature 20 ± 5 °C (68 ± 9°F)**
- **Measuring instrument**
- **EVM (Electronic Volmeter)**
- **Digital quency counter**
- **Test Tape**
- **Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT**

12.1.1. Tape Speed Adjustment (Deck 1/2)

1. **Set the tape edit button to “NORMAL” position.**
2. **Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.**
3. **Adjust Motor VR (DECK 2) for the output value shown below.**

Adjustment target: 2940 ~ 3060 Hz
(NORMAL speed)

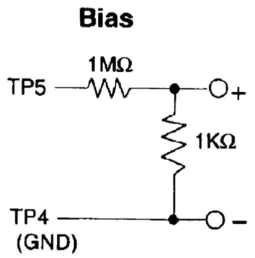
4. **After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.**

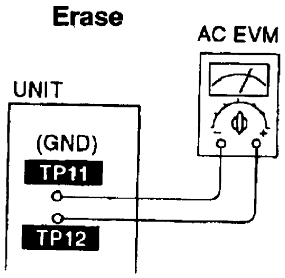

UNIT
(Rch)
PBR
TP10
(GND)
+
-
Digital frequency counter

12.1.2. Bias and Erase Voltage Check

1. **Set the unit “AUX” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to “REC” mode (use “ ● REC/STOP” key).**
3. **Measure and make sure that the output is within the standard value.**

Bias voltage for Deck 2	**14 ± 4mV (Normal)**
Erase voltage for Deck 2	**more than 80mV (Normal)**

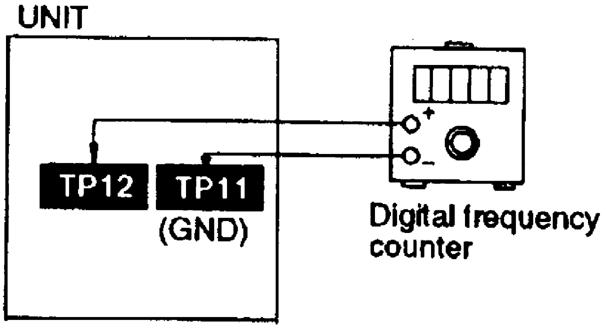

Bias
1MΩ
TP5
O+
1KΩ
TP4
(GND)
O −


Erase
AC EVM
UNIT
(GND)
TP11
TP12

12.1.3. Bias Frequency Adjustment (Deck 1/2)

1. **Set the unit to “AUX” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to “REC” mode (● use “REC/STOP” key).**
3. **Adjust L1002 so that the output frequency is within the standard value.**

Standard Value: 97 ±8 kHz


UNIT
TP12
TP11
(GND)
+
−
Digital frequency counter

12.2. Tuner Section

12.2.1. AM-IF Alignment

SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.3)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	450 kHz 30% Mod. at 400Hz.	Point of non-interference (on/ about 600 kHz)	Headphones Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z102 (AM IFT)	Adjust for maximu output.

12.2.2. AM-RF Alignment

SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.3)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	522 kHz	Tuning capacitor fully closed	Headphones Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z101 (AM OSC Coil)	Adjust for maxim output.
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	603 kHz	Tuning to signal	Headphones Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z101 (AM ANT Coil)	Adjust for maxim output.

12.3. Alignment Points

Cassette Deck section

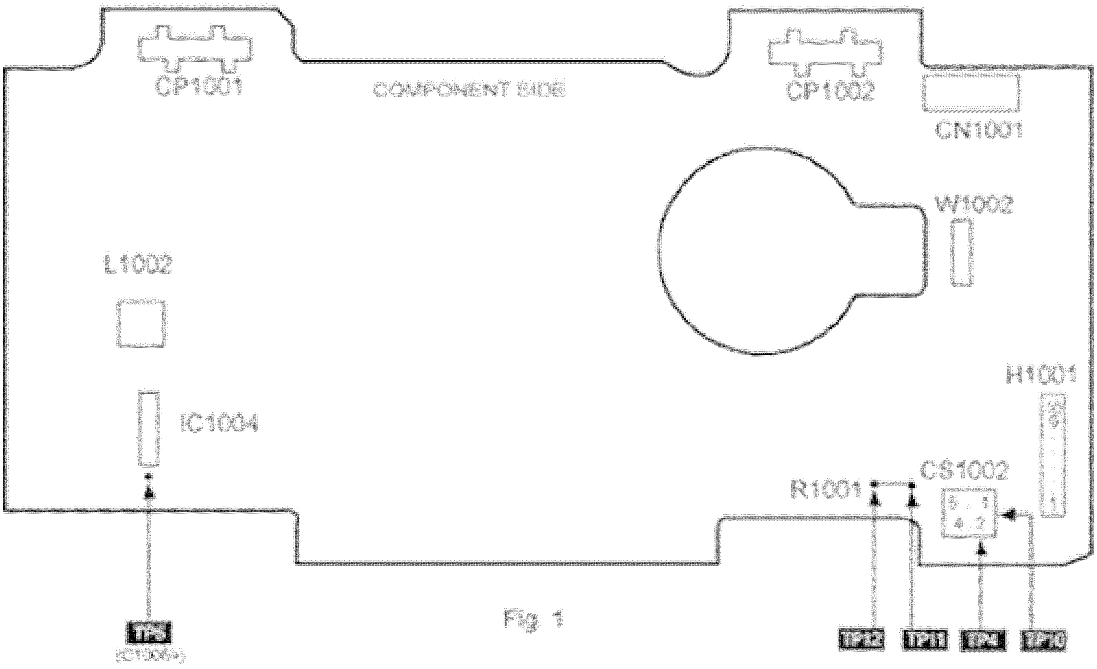

CP1001
COMPONENT SIDE
CP1002
CN1001
W1002
L1002
H1001
IC1004
CS1002
R1001
5 1
4 2
TP5
(C1006+)
TP12
TP11
TP4
TP10

Fig. 1

Tuner section

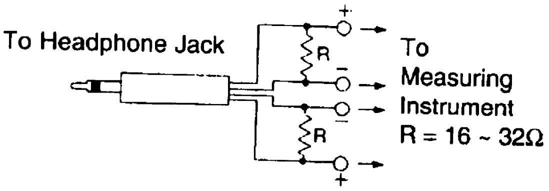

To Headphone Jack
R
R
+
−
−
+
To
Measuring
Instrument
R = 16 ~ 32Ω

Fig. 2

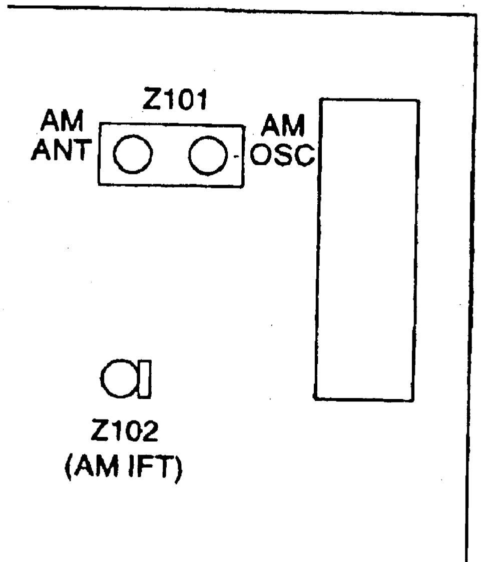

Z101
AM
ANT
AM
OSC
Z102
(AM IFT)

Fig. 3

13. Illustration of IC's, Transistors and Diodes

14. Terminal Function of IC's

14.1. IC701 (AN8885SBE1) Servo Amplifier

Pin No.	Mark	I/O	Function
1	PDE	I	Tracking signal input 1
2	PDF	I	Tracking signal input 2
3	VCC	I	Power supply
4	PDA	I	Focus signal input terminal 1
5	PDB	I	Focus signal input terminal 2
6	LPD	I	APC amp input
7	LD	O	APC amp output
8	RF	O	RFsumming output
9	RFIN	I	Detector’s input
10	CSBRT	I	Capacitor for OFTR connection
11	CEA	I	Capacitor for HPF amp connection
12	BDO	O	BDO output (“H” : drop out)
13	LDON	I	APC control
14	GND	—	Ground
15	/RFDET	O	NRFDET output (“L” : detection)
16	PDOWN	O	Power-down input
17	OFTR	O	OFTR output
18	NC	O	N.C.
19	ENV	O	3T-ENV output
20	NC	I	N.C.
21	NC	I	N.C.
22	TEN	I	TE amp input
23	TEOUT	O	TE amp output
24	FEOUT	O	FE amp output
25	FEN	I	FE amp input
26	VREF	O	Reference voltage output
27	TBAL	I	Tracking balance control
28	FBAL	I	Focus balance control

14.2. IC702 (MN662790RSC) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	BCLK	O	N.C.
2	LRCK	O	N.C.
3	SRDATA	O	N.C.
4	DVDD1	I	Power supply input (for digital circuit)
5	DVSS1	I	GND (for digital circuit)
6	TX	O	Digital audio interface signal output (Latches data at first transition)
7	MCLK	I	Microprocessor command clock signal input
8	MDATA	I	Microprocessor command data signal input
9	MLD	I	Microprocessor command load signal input
10	SENSE	O	Sense signal output (OFT, FESL,MAGEND,NAJEND,POSAD,SFG) (Not used, open)
11	/FLOCK	O	Focus servo feeding signal output (“L” : Feed)
12	/TLOCK	O	Tracking servo feeding signal output (“L” : Feed)
13	BLKCK	O	Sub-code block clock signal output (BLKCKf = 75Hz during normal playback)
14	SQCK	I	External clock signal input for sub-code Q resistor
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input (“H” : mute)
17	STAT	O	Status signal output (CRC,CUE,CLVS,TTSTOP,FCLV,SQCK)
18	/RST	I	Reset signal input
19	SMCK	O	1/2-diveded clock signal of crystal osscillating at MSEL = “H” (fSMCK = 8.4672 MHz) 1/4-divided clock signal of crystal oscillating at MSEL = “L” (fSMCK = 4.2336 MHz)
20	CSEL	I	Frequency Selection Terminal H = 33.8688 MHz ; L = 16.9344 MHz
21	TRV	O	N.C
22	TVD	O	Traverse drive output
23	PC	O	Spindle motor ON output ("L" : ON)
24	ECM	O	Spindle motor drive signal output(forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	N.C.
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	D/A (drive) output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference voltage input
30	FBAL	O	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input ("H" : detection)
36	OFT	I	Off-track signal input ("H" : off track)
37	TRCRS	I	Track cross signal input

18	**/RST**	**I**	**Reset signal input**				**input**

Pin No.	Mark	I/O	Function
38	/RFDET	I	RF detection signal input ("L" : detection)
39	BDO	I	Dropout signal input ("H" : Dropout)
40	LDON	O	Laser on signal output ("H" : ON)
41	PLLF2	I/O	N.C.
42	DSLF2	O	Tracking Offset alignment output/ DSL Balance Output (DA Output)
43	WVEL	O	N.C.
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias terminal (Not used, open)
47	DSLF	I/O	DSL loop filter terminal
48	PLLF	I/O	PLL loop filter terminal
49	VCOF	I/O	VCO loop filter terminal
50	AVDD2	I	Power supply input (for analog circuit)
51	AVSS2	I	GND (for analog circuit)
52	EFM	-	EFM signal output
53	PCK	-	PLL extraction clock output (fPCK = 4.321 MHz during normal playback)
54	VCOF2	I/O	VCO Loop filter for 33.8688 MHz conversation terminal for 16.9344 MHz crystal mode, must use other circuit
55	SUBC	O	Sub-code serial data output
56	SBCK	I	Clock input for sub-code serial data
57	VSS	I	GND
58	X1 IN	I	Crystal oscillating circuit input (f = 16.9344MHz)
59	X2 OUT	O	Crystal oscillating circuit input (f = 16.9344 MHz)

Pin No.	Mark	I/O	Function
60	VDD	I	Power supply input (for oscillating circuit)
61	BYTCK	-	Byte clock output
62	/CLDCK	-	Sub-code frame clock signal output (fCLDCK = 7.35 kHz during normal playback)
63	FCLK	-	Crystal frame clock signal output (fCLK = 7.35 kHz, double = 14.7 kHz)
64	IPFLAG	-	Interpolation flag output (“H” : Interpolation)
65	FLAG	-	Flag output
66	CLVS	-	Spindle servo phase synchronizing signal output ("H" : CLV, "L" : rough servo)
67	CRC	-	Sub-code CRC checked output (“H’ : OK, “L” :NG)
68	DEMPH	-	De-emphassis ON signal output (“H” : ON)
69	RESY	-	Frame re-synchronizing signal output
70	IOSEL	I	Mode Switching Terminal
71	/TEST	I	Test input
72	AVDD1	I	Power supply input (for analog circuit)
73	OUTL	O	Left channel audio signal output
74	AVSS1	I	GND
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at "H" level, RSEL="H", at "L" level, RESL= "L")
77	IOVDD	I	5V supply input
78	PSEL	I	Test terminal (connected to Gnd)

Pin No.	Mark	I/O	Function
79	MSEL	I	SMCK oscillating frequency designation input (“L” :4.2336 MHz, “H”: 8.4672 MHz)
80	SSEL	I	SUBQ output mode select (“H”:Q-code buffer mode)

14.3. IC703 (AN8739SBE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor driver

Pin No.	Mark	I/O	Function
1	/RST	-	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor Drive (2) input
4	PC2	I	Turntable motor drive signal (“L :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	NC	I	N.C.
8	PVCC1	I	Power supply (1) for driver
9	PGND1	-	Ground connection (1) for driver
10	NC	-	N.C.
11	D1-	O	Motor driver (1) reverse-action output
12	D1+	O	Motor driver (1) forward-action output
13	D2-	O	Motor driver (2) reverse-action output
14	D2+	O	Motor driver (2) forward-action output
15	D3-	O	Motor driver (3) reverse-action output
16	D3+	O	Motor driver (3) forward-action output
17	D4-	O	Motor driver (4) reverse-action output
18	D4+	O	Motor driver (4) forward-action output
19	NC	-	N.C.
20	PGND2	-	Ground connection (2) for driver
21	PVCC2	I	Power supply (2) for driver
22	NC	-	N.C.
23	VCC	I	Power supply terminal
24	VREF	I	Reference voltage input
25	IN4	I	Motor driver (4) input
26	IN3	I	Motor driver (3) input
27	RSTIN	I	Reset terminal
28	NC	-	N.C.

14.4. IC600 (M38B79MFA158) System Microprocessor

Pin No.	Mark	I/O	Function
1	DECK2	I	Tape mecha condition input (Half2 /Reci_F/Mode/Reci_R)
2	KEY3	I	Key 3 input
3	KEY2	I	Key 2 input
4	KEY1	I	Key 1 input
5	V_JOG_AD	I	Volume jog A-D detection input
6	J_JOG_AD	I	EQ Joy jog A-D detection input
7	CHG_AD1	I	(Open Clamp) Chngr sw A-D detection input 1
8	CHG_AD2	I	(Position/ bottom) Chngr sw A-D detection input 2
9	/CDRST	O	CD reset output
10	STATUS	I	CD signal processor status input (INV)
11	SPE	I	Speana input
12	ST/DO/ SQCK	I/O	Tuner if data/stereo input and CD subcode clock output
13	SD	I/O	Tuner signal detect input
14	SUBQ	I	CD subcode data input (INV)
15	RDS_CL	I	RDS clock input
16	RDS_DA	I	RDS data input
17	CNVSS	-	Flash mode terminal (connect to ground)
18	/RESET	-	RESET input
19	XCOUT	-	32.768 kHz sub clock
20	XCIN	-	32.768 kHz sub clock
21	VSS	-	Ground (0V)
22	XIN	-	4.19 MHz main clock
23	XOUT	-	4.19 MHz main clock
24	VCC	-	Power supply (+5V)
25	MBP1	O	MPU beat proof output 1
26	MBP2	O	MPU beat proof output 2
27	MCLK/ PLLCK	O	CD command clock output/ tuner PLL clock output

Pin No.	Mark	I/O	Function
28	MDATA/ PLLDA	O	CD command data output/ tuner PLL data output
29	RMT	I	Remote control input
30	BLKCK	I	CD block clock input (INV)
31	MLD/ PLLCE	O	CD command load output/ tuner PLL chip enable
32	SYNC	I	AC failure detect input
33	DCDET 1	I	DC detect input 1
34	DCDET 2	I	DC detect input 2
35	CHG_CCW	O	Changer motor CCW output
36	CHG_CW	O	Changer motor CW output
37	CHG_HALF	O	Changer half drive output
38	CHG_PLGR	O	Changer plunger output
39	CHG_SW2	I/O	CD changer SW2 input
40	CHG_SW1	I/O	CD changer SW1 input
41	SP_A	O	Speana control output A
42	SP_B	O	Speana control output B
43	SP_C	O	Speana control output C
44	SWFK_LED	O	Super woofer LED
45-63	SEG1-SEG19	O	Segment drive output (Anode drive output)
64-72	SEG20-28 REG9-1	O	Segment drive output (Anode drive output) For regional setting/ function selection use
73-76	SEG29-32	O	Segment drive output (Anode drive output)
77-88	GRD12-1	O	Digit drive output (Grid drive output)
89	VEE	-	Power supply (-30V)

Pin No.	Mark	I/O	Function
90	REG_IN EE_CS	I/O	Region and function setting input and eeprom chip select output
91	ECONO	O	Main transormer control output for economy mode
92	RESTSW	I	CD limit SW input for the most inner point (Active Low)
93	SER4	O	EEPROM_CLK / EXP2_CLK/MK_CLK
94	SER3	O	ASP latch
95	SER2	O	ASP_CLK/EXP1_CLK/ MK_DAT
96	SER1	I/O	EEPROM_DAT / ASP_DAT / EXP1_DAT / EXP2 DAT
97	AVSS	-	Analog ground (0V)
98	VREF	-	Reference for A-D
99	TPS	I	Tape mecha TPS Input/ chrome 1 / chrome 2
100	DECK1	I	Tape mecha condition input (Half1 /Mode/Photo1/Photo 2)

15. Block Diagram

16. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)
Note:

S701

: Reset switch

S900

: CD Manager switch

S901

: CD 1 switch

S902

: CD 2 switch

S903

: CD 3 switch

S904

: CD 4 switch

S905

: CD 5 switch

S906

: Rec/Stop select switch

S907

: Rec Mode select switch

S908

: Tape Edit select switch

S909

: Tune Down switch

S910

: FM Mode/BP switch

S911

: Memory switch

S912

: Tune Mode switch

S913

: Tune Up switch

S920

: CD Eject switch

S940

: AUX switch

S941

: Tuner switch

S942

: Tape switch

S943

: CD switch

S945

: Super Sound EQ switch

S950

: Deck 2 switch

S951

: Mode switch

S952

: Half switch

S953

: Cr02 switch

S956

: Power switch

S958

: Play/Rec Timer switch

S959

: Clock/Timer switch

S960

: RDS switch

S961

: Display/Demo switch

S962

: Deck 1 Open switch

S971

: Mode switch

S972

: Half Switch

S973

: Cr02 switch

S974

: RECINH_R switch

S975

: RECINH_F switch

SW1

: Push switch

SW2

: Push switch

SW3

: Leaf switch

SW4

: CD switch

SW5

: Lock switch

SW600

: Joy Jog switch

VR900

: VR Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

No mark	: Playback	<< >>	: Rec	< >	: FM
(( ))	: CD	( )	: AM	[ ]	: AUX

- Importance safety notice :
  Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

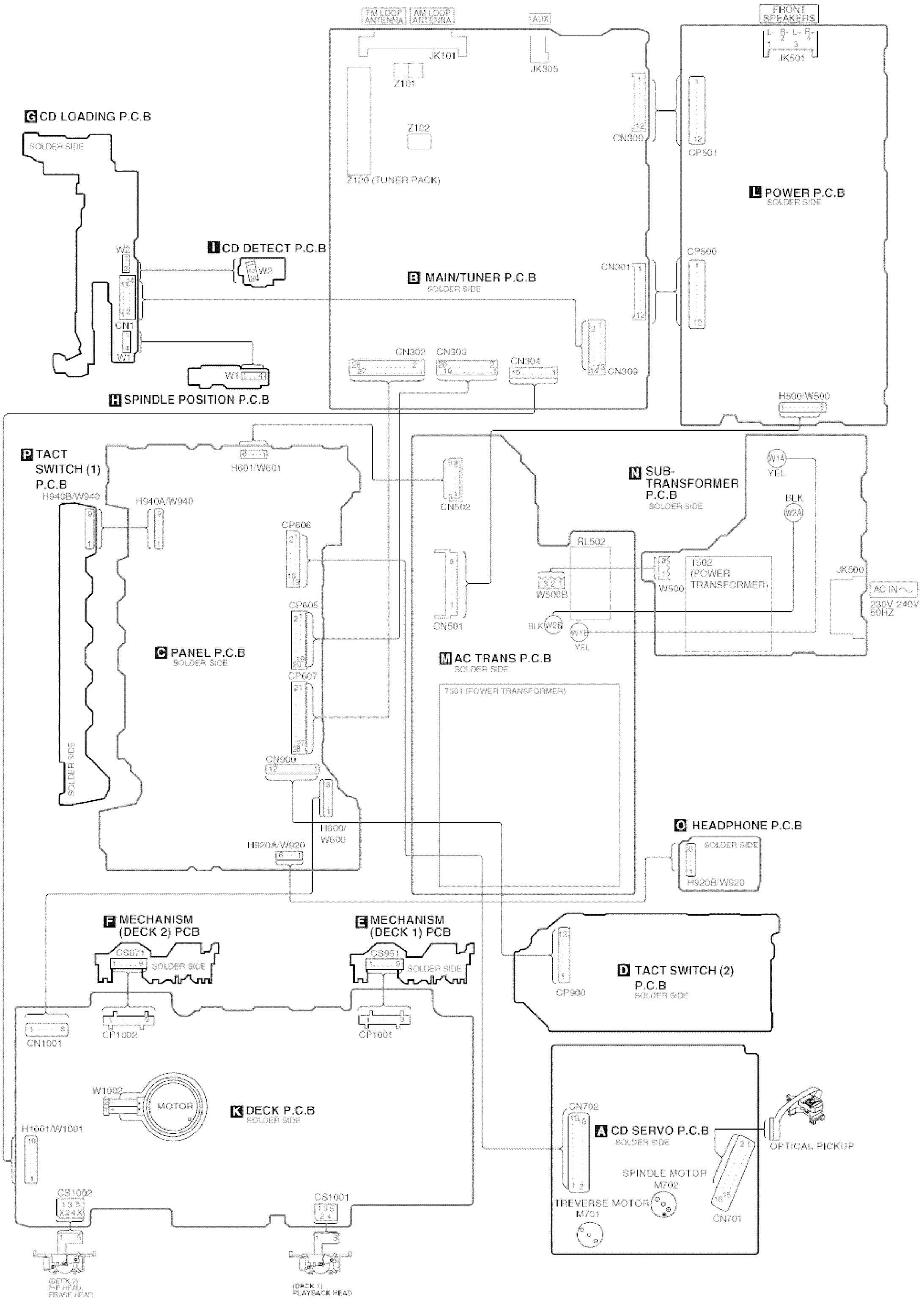
- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

“CAUTION: REPLACE FUSIBLE RESISTOR WITH THE SAME TYPE RSFMB40KT-L FUSIBLE RESISTOR”“ATTENTION: REMPLACER LA RESISTANCE FUSIBLE PAR UNE RESISTENCE FUSIBLE DE MEME TYPE RSFMB40KT-L.

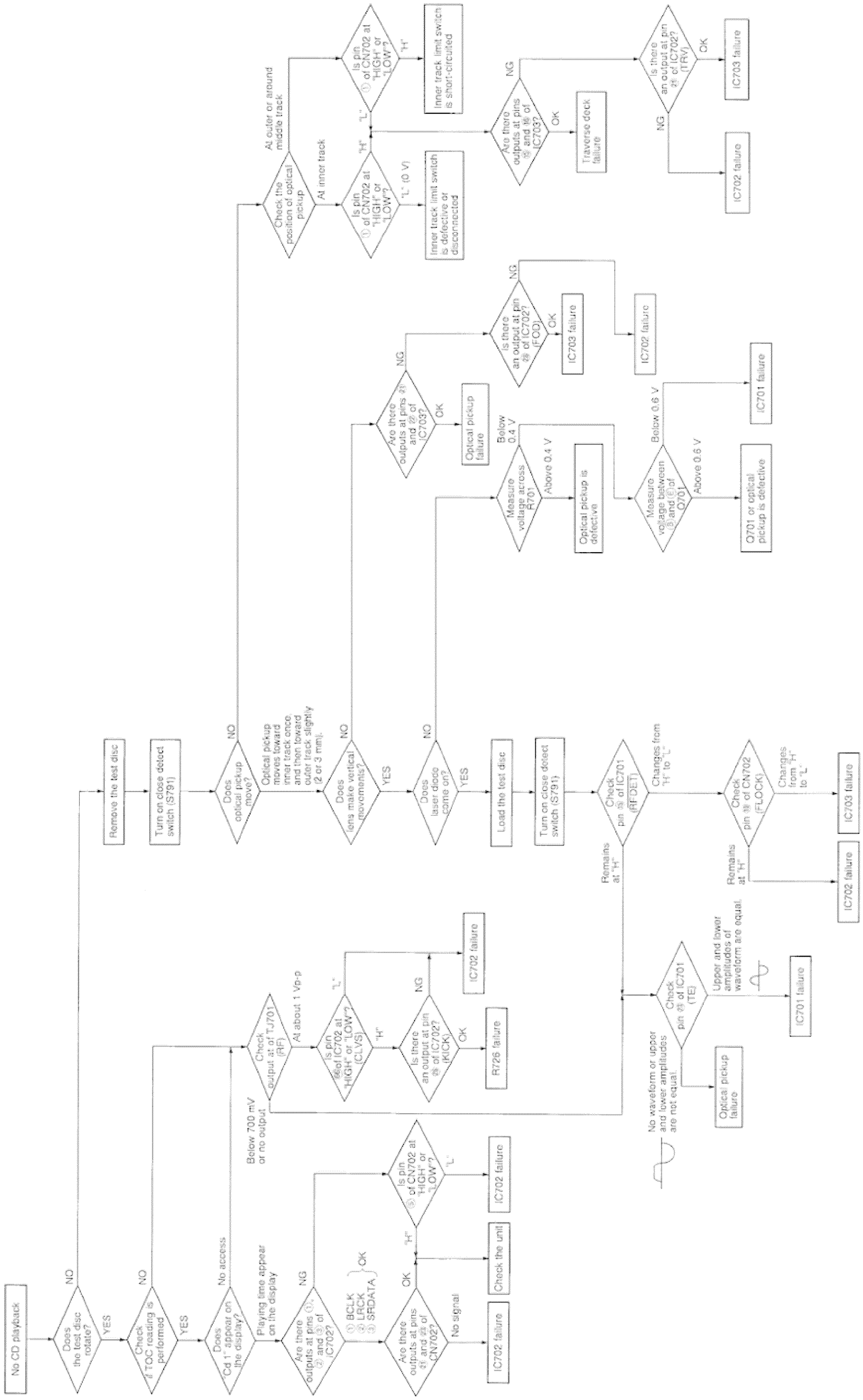
17. Printed Circuit Board

Note: Circuit board diagrams may be modified at any time with the development of new technology.

18. Wiring Connection Diagram


FM LOOP ANTENNA
AM LOOP ANTENNA
AUX
FRONT SPEAKERS
JK101
Z101
JK305
L- R- L+ R+
JK501
G CD LOADING P.C.B
SOLDER SIDE
Z102
CN300
CP501
Z120 (TUNER PACK)
L POWER P.C.B
SOLDER SIDE
W2
I CD DETECT P.C.B
W2
CP500
CN301
B MAIN/TUNER P.C.B
SOLDER SIDE
CN1
W1
CN302
CN303
CN304
CN309
W1
H SPINDLE POSITION P.C.B
H500/W500
P TACT SWITCH (1) P.C.B
H601/W601
H940B/W940
H940A/W940
CN502
N SUB-TRANSFORMER P.C.B
SOLDER SIDE
W1A
YEL
BLK
W2A
CP606
RL502
T502 (POWER TRANSFORMER)
W500B
W500
JK500
AC IN
230V 240V 50HZ
CN501
BLK W2B
W1B
YEL
CP605
C PANEL P.C.B
SOLDER SIDE
M AC TRANS P.C.B
SOLDER SIDE
CP607
T501 (POWER TRANSFORMER)
SOLDER SIDE
CN900
H600/W600
O HEADPHONE P.C.B
SOLDER SIDE
H920A/W920
H920B/W920
F MECHANISM (DECK 2) PCB
CS971
SOLDER SIDE
E MECHANISM (DECK 1) PCB
CS951
SOLDER SIDE
D TACT SWITCH (2) P.C.B
SOLDER SIDE
CP900
CN1001
CP1002
CP1001
W1002
MOTOR
K DECK P.C.B
SOLDER SIDE
H1001/W1001
CN702
A CD SERVO P.C.B
SOLDER SIDE
OPTICAL PICKUP
SPINDLE MOTOR
M702
CS1002
CS1001
TREVERSE MOTOR
M701
CN701
(DECK 2) R/P HEAD, ERASE HEAD
(DECK 1) PLAYBACK HEAD

19. Troubleshooting Guide


No CD playback
Does the test disc rotate?
NO
YES
Remove the test disc
Turn on close detect switch (S791)
Does optical pickup move?
NO
Optical pickup moves toward inner track once and then toward outer track slightly (2 or 3 mm).
Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"L" (0 V)
"H"
Inner track limit switch is defective or disconnected
Is pin ① of CN702 at "HIGH" or "LOW"?
"L"
"H"
Inner track limit switch is short-circuited
Are there outputs at pins ⑮ and ⑯ of IC703?
OK
NG
Traverse deck failure
Is there an output at pin ㉑ of IC702? (TRV)
OK
NG
IC703 failure
IC702 failure
Does lens make vertical movements?
NO
YES
Are there outputs at pins ㉑ and ㉒ of IC703?
OK
NG
Optical pickup failure
Is there an output at pin ㉘ of IC702? (FOD)
OK
NG
IC703 failure
IC702 failure
Does laser diode come on?
NO
YES
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup is defective
Measure voltage between Ⓑ and Ⓔ of Q701
Below 0.6 V
Above 0.6 V
IC701 failure
Q701 or optical pickup is defective
Load the test disc
Turn on close detect switch (S791)
Check pin ⑤ of IC701 (RFDET)
Remains at "H"
Changes from "H" to "L"
Check pin ⑯ of CN702 (FLOCK)
Remains at "H"
Changes from "H" to "L"
IC702 failure
IC703 failure
Check pin ㉔ of IC701 (TE)
No waveform or upper and lower amplitudes are not equal.
Upper and lower amplitudes of waveform are equal.
Optical pickup failure
IC701 failure
Check if TOC reading is performed
NO
YES
Check output at of TJ701 (RF)
Below 700 mV or no output
At about 1 Vp-p
Is pin ⑯ of IC702 at "HIGH" or "LOW"? (CLVS)
"L"
"H"
IC702 failure
Is there an output at pin ㉖ of IC702? (KICK)
NG
OK
IC702 failure
R726 failure
Does "Cd 1" appear on the display?
No access
YES
Playing time appear on the display
Are there outputs at pins ①, ② and ③ of IC702?
① BCLK
② LRCK
③ SRDATA
OK
NG
Is pin ⑤ of CN702 at "HIGH" or "LOW"?
"L"
"H"
IC702 failure
Check the unit
Are there outputs at pins ㉛ and ㉜ of CN702?
OK
No signal
IC702 failure

20. Parts Location and Replacement Parts List

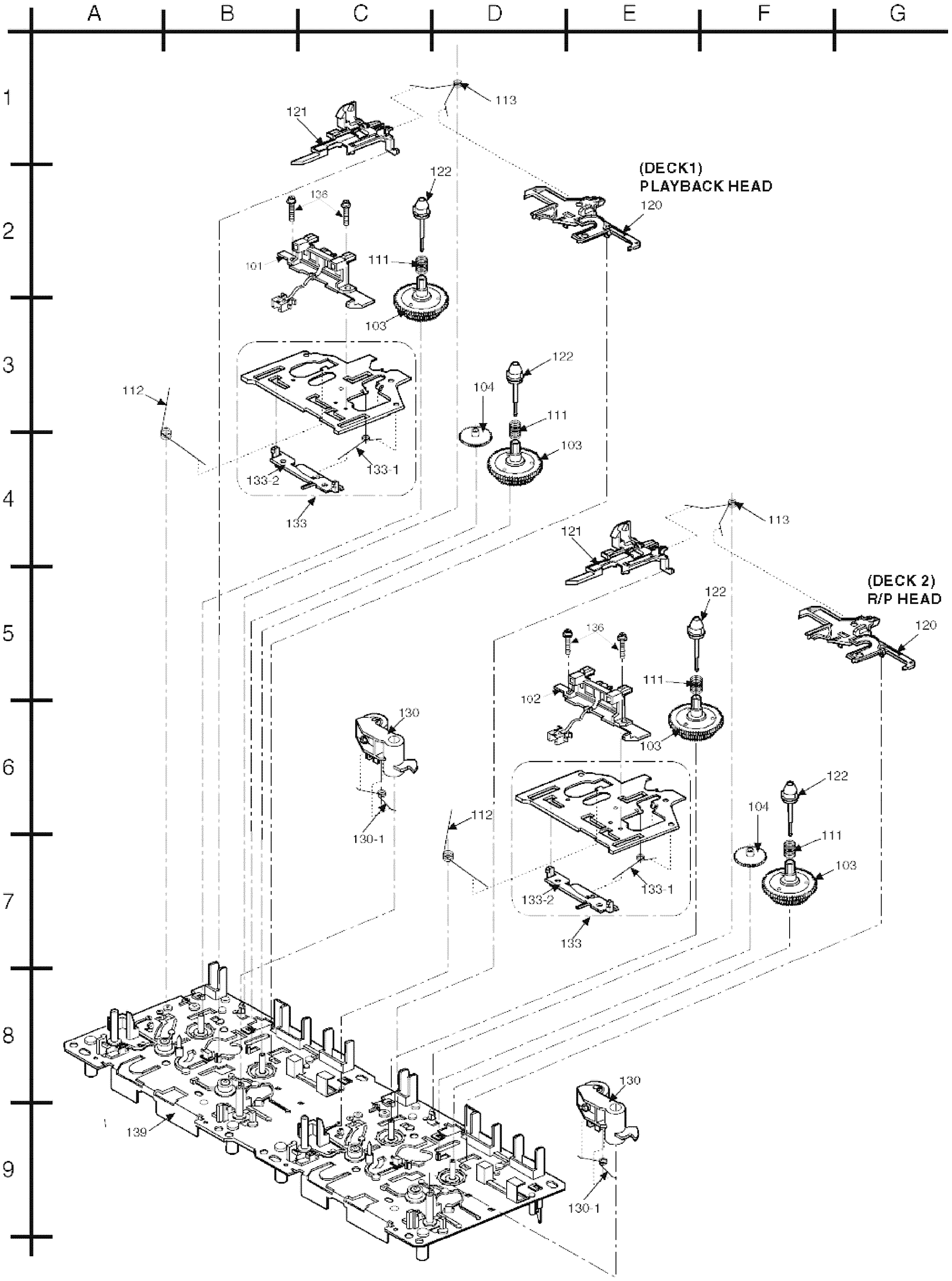
Notes:

- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
  When replacing any of these components, be sure to use only manufacturer’s specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on “Precaution of Laser Diode”.
  ACHTUNG:
- Die Lasereinheit nicht zerlegen.
- Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.
- Capacitor values are in microfarads (μ F) unless specified otherwise, P = Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by MESA.
- The “(SF)” mark denotes the standard part.
- Remote Control Unit: Supply period for three years from terminal of production.
- Reference for O/I book languages are as follows:

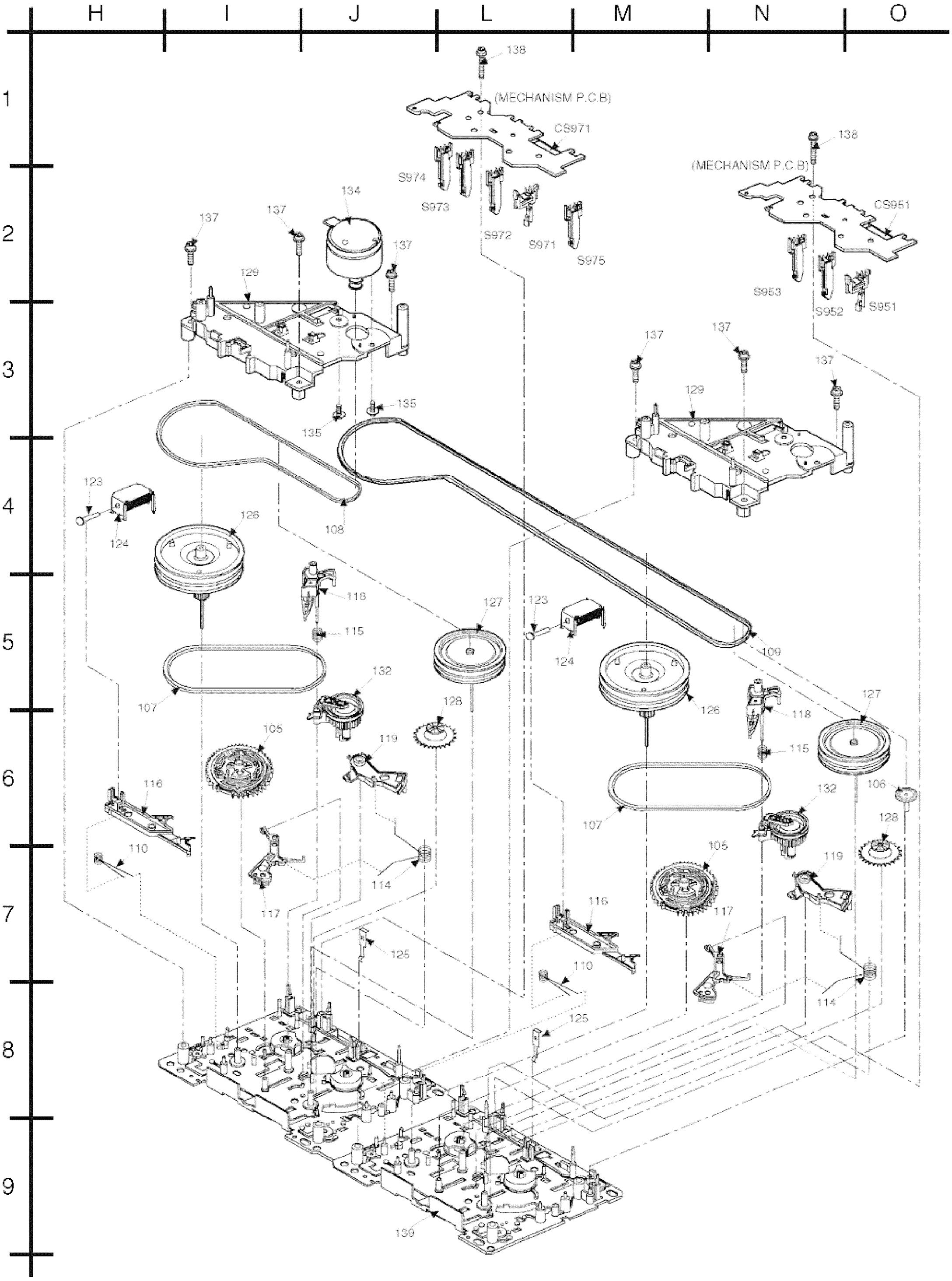
Ar :	**Arabic**	**Du :**	**Dutch**	**It :**	**Italian**	**Sp :**	**Spanish**
Cf :	**Canadian French**	**En :**	**English**	**Ko :**	**Korean**	**Sw :**	**Swedish**
Cz :	**Czech**	**Fr :**	**French**	**Po :**	**Polish**	**Co :**	**Traditional Chinese**
Da :	**Danish**	**Ge :**	**German**	**Ru :**	**Russian**	**Cn :**	**Simplified Chinese**

20.1. Deck Mechanism (RAA4501-S)

20.1.1. Deck Mechanism Parts Location



A
B
C
D
E
F
G
(DECK1)
PLAYBACK HEAD
133-2
133-1
(DECK 2)
R/P HEAD
130-1
133-2
133-1
130-1

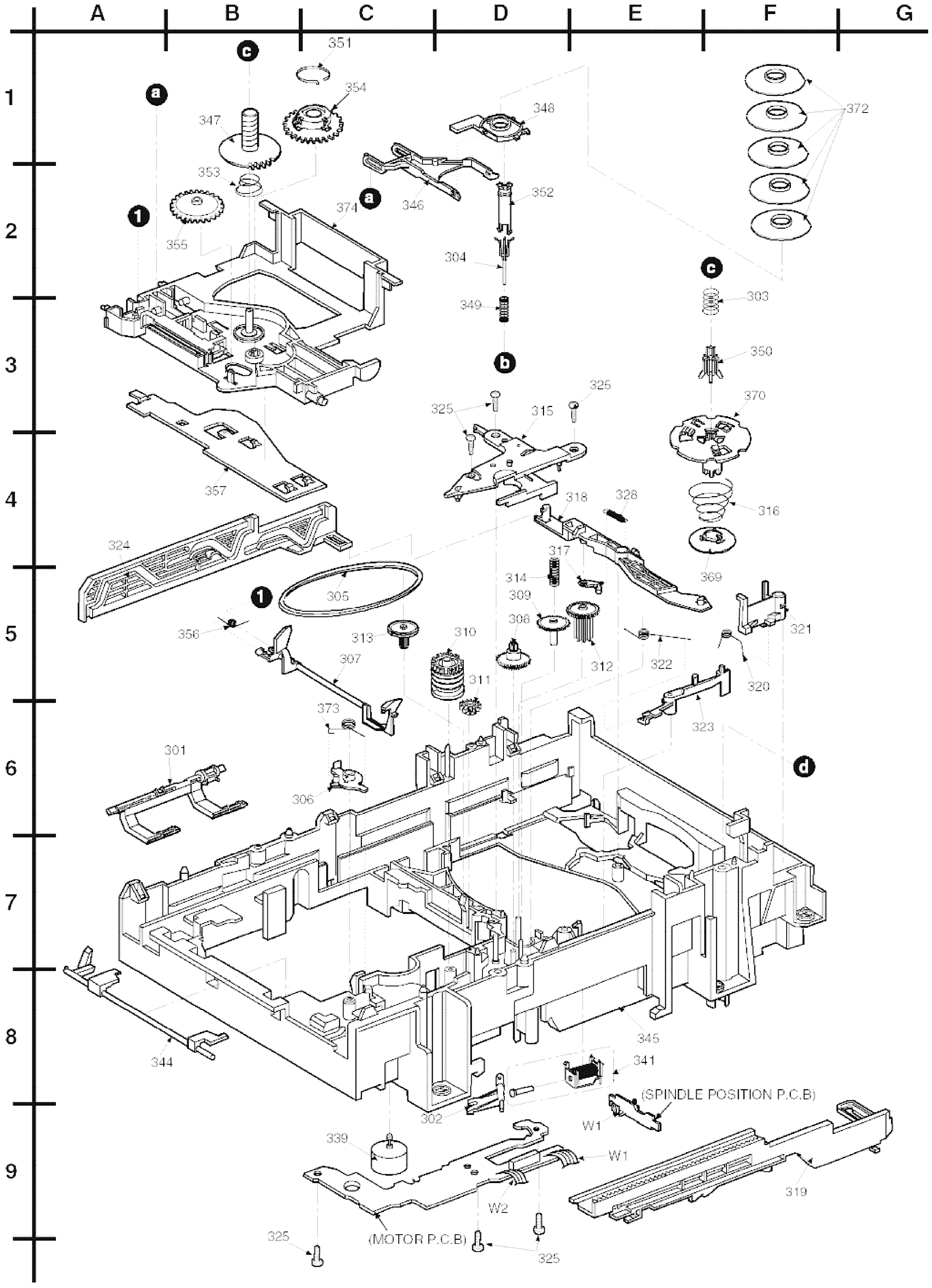

H
I
J
L
M
N
O
1
2
3
4
5
6
7
8
9
138
(MECHANISM P.C.B)
CS971
S974
S973
S972
S971
S975
138
(MECHANISM P.C.B)
CS951
S953
S952
S951
134
137
137
137
129
135
135
137
137
137
129
123
124
126
108
118
115
127
123
124
109
107
132
128
105
119
126
118
115
127
106
116
110
114
117
125
107
132
128
105
119
116
117
110
125
114
139

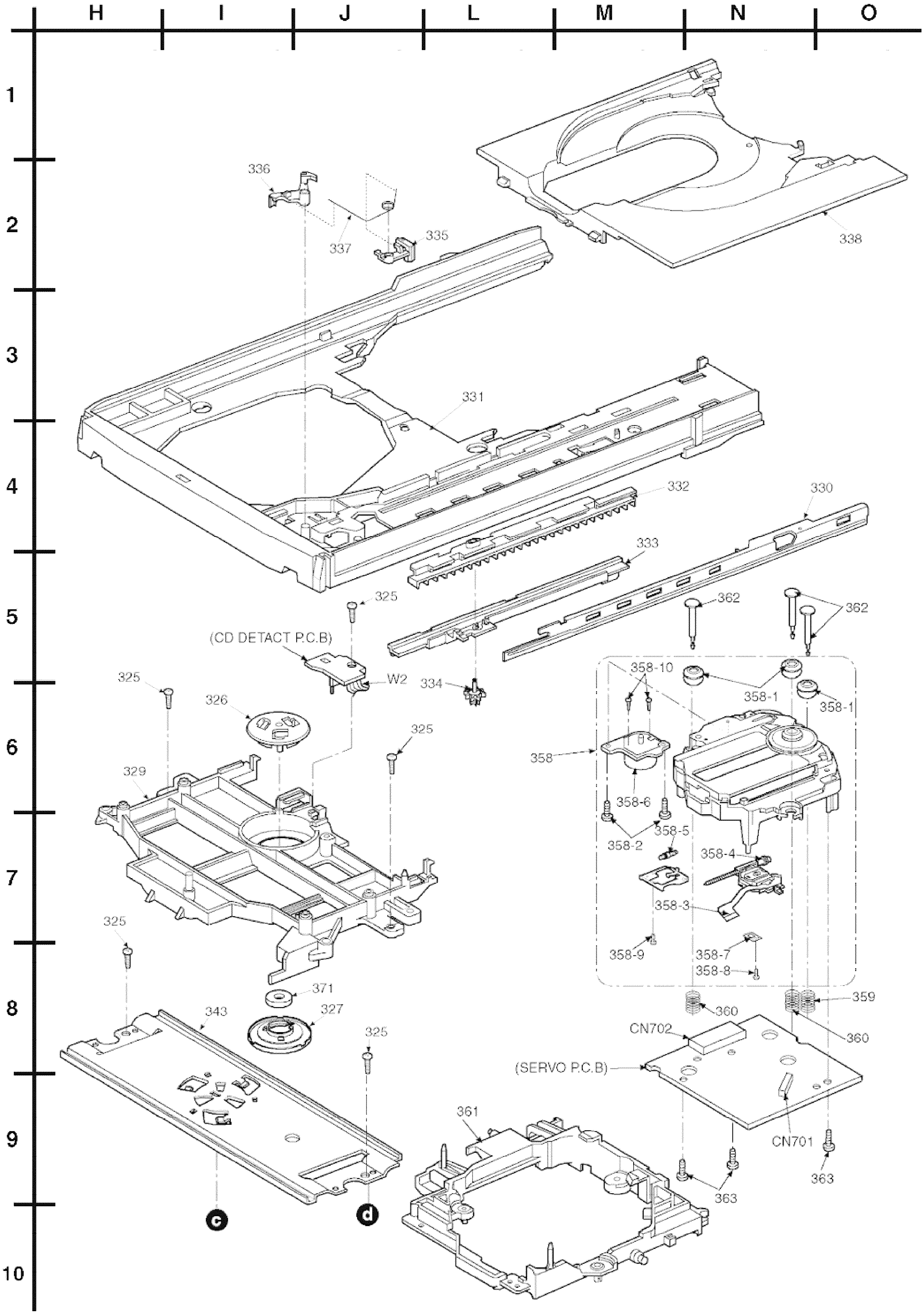
20.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0067	HEAD BLOCK UNIT	[M]
102	RED0068	R/P HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
106	RDR0029	RELAY PULLEY	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
109	RDV0057	MAIN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133-1	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS’Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0049	FLYWHEEL F ASS’Y	[M]
127	RXF0050	FLYWHEEL R ASS’Y	[M]
128	RXG0040	FF RELAY GEAR ASS’Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS’Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS’Y	[M]
133	RXQ0412	HEAD PANEL ASS’Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0070	CAP MOTOR ASS’Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCRE	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS’Y	[M]

20.2. CD Loading Mechanism (RD-DAC026-S)

20.2.1. CD Loading Mechanism Parts Location


A
B
C
D
E
F
G
c
a
a
c
b
d
(SPINDLE POSITION P.C.B)
W1
W1
W2
(MOTOR P.C.B)


H
I
J
L
M
N
O
1
2
3
4
5
6
7
8
9
10
336
337
335
338
331
332
330
333
325
362
362
(CD DETACT P.C.B)
W2
334
358-10
358-1
358-1
325
326
325
358
329
358-6
358-2
358-5
358-4
358-3
325
358-9
358-7
358-8
371
359
343
327
360
325
CN702
360
(SERVO P.C.B)
361
CN701
363
363
c
d

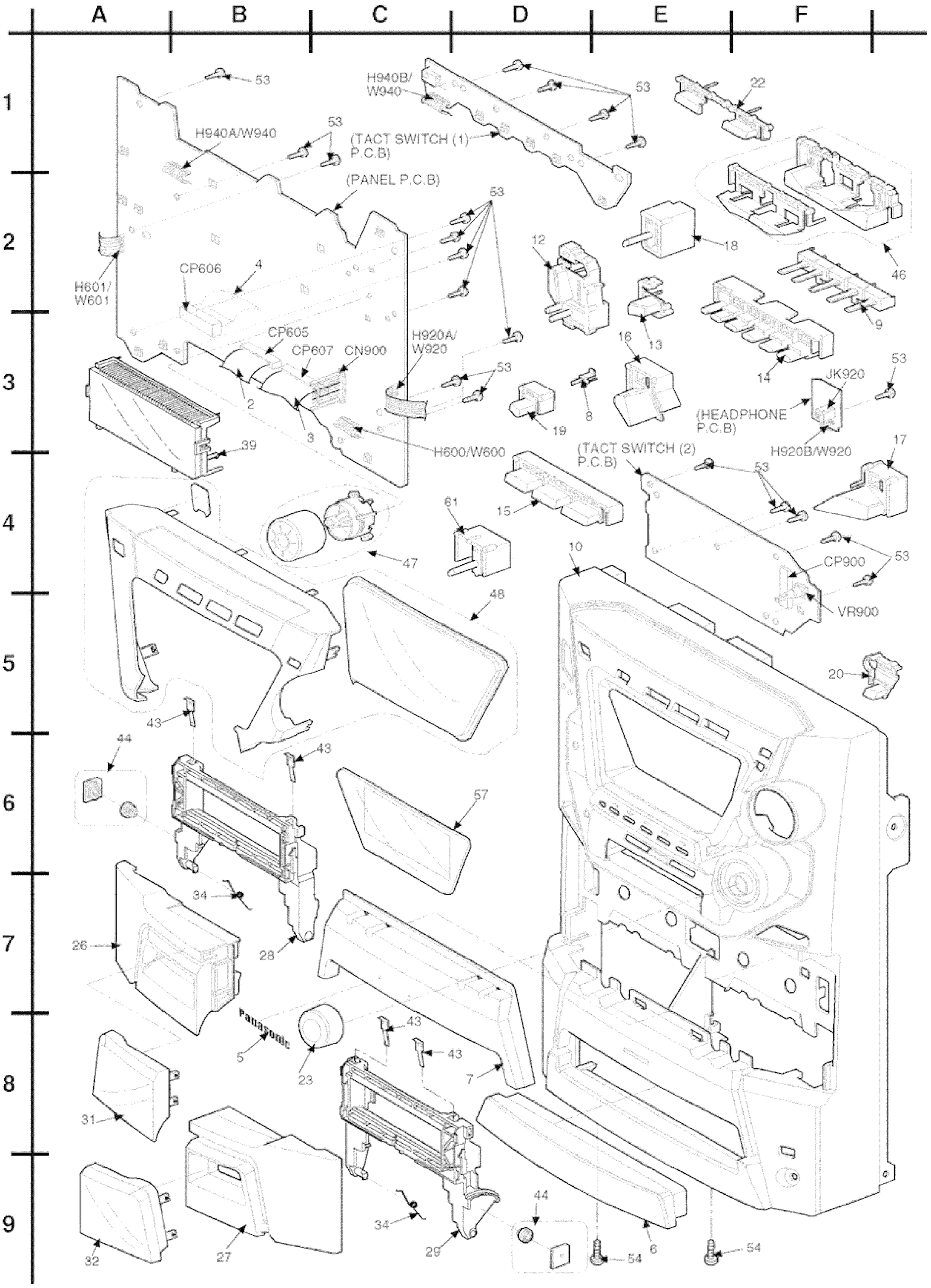
20.2.2. CD Loading Mechanism Parts List

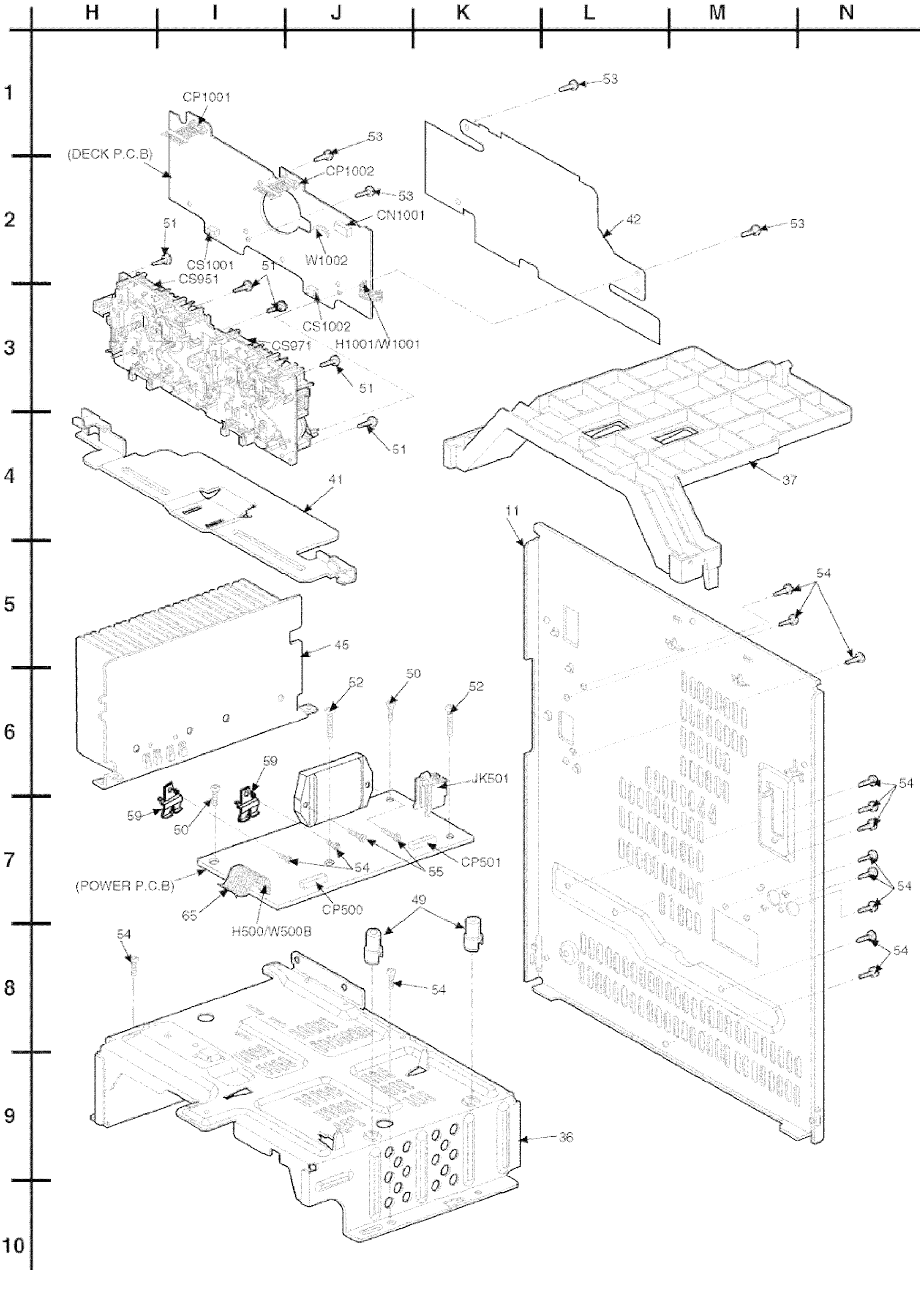
Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRI	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS’Y	[M]
341	RSJ0003	SOLENOLD ASS’Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	8CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS’Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR ‘A’	[M]
355	RDG0431	RELAY GEAR ‘B’	[M]
356	RME0262	DISK LEVER SP.	[M]
357	RMA1105	SUPPORT PLATE	[M]

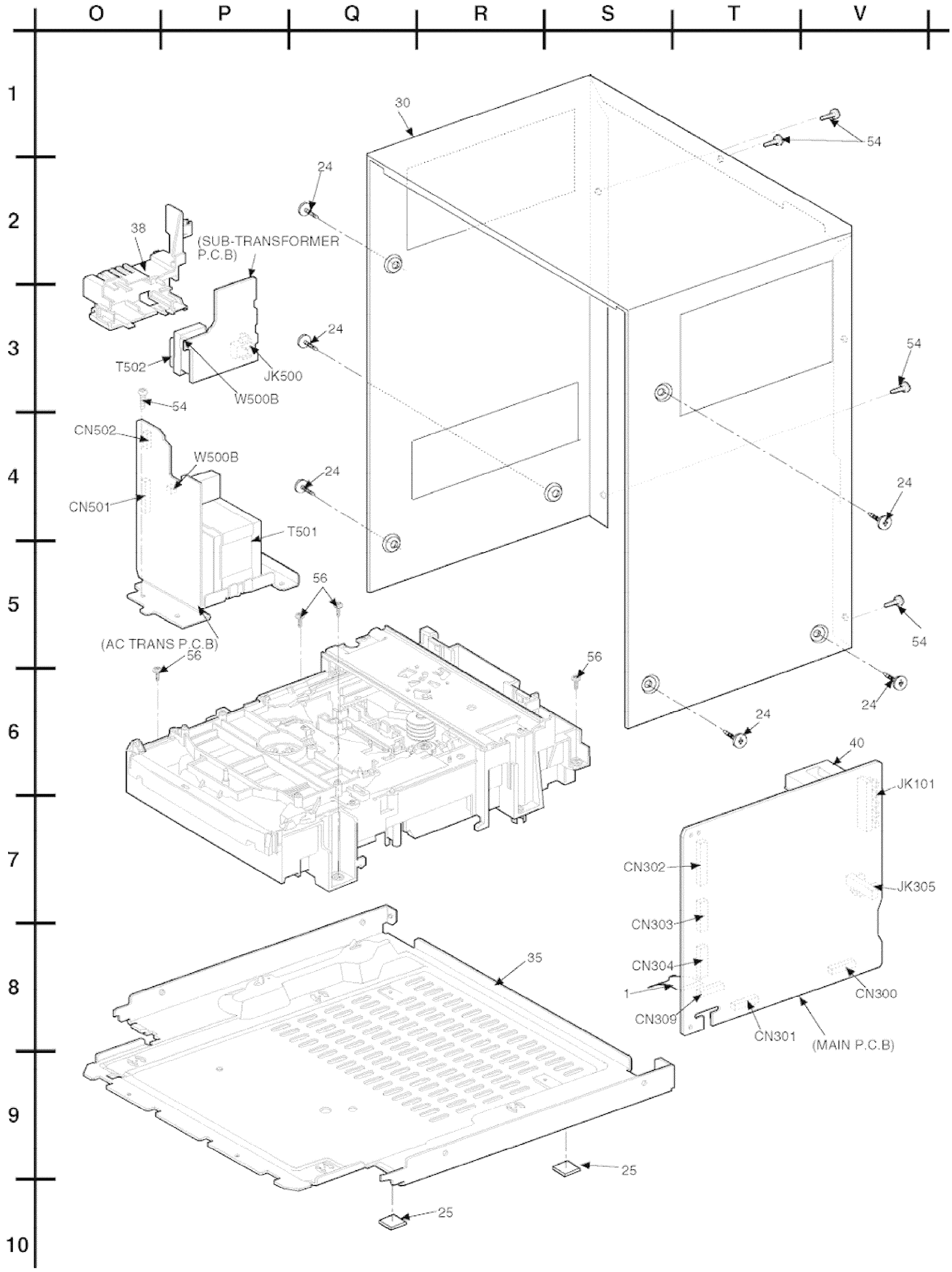
Ref. No.	Part No.	Part Name & Description	Remarks
358	RAE0152Z-3	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0150A-4S	50A OPTICAL PICKUP	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASSY	[M]
358-7	RXQ0304-1	NUT PLATE ASSY	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124-K1	TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

20.3. Cabinet

20.3.1. Cabinet Parts Location


A
B
C
D
E
F
H940B/
W940
H940A/W940
(TACT SWITCH (1)
P.C.B)
(PANEL P.C.B)
H601/
W601
CP606
CP605
H920A/
W920
CP607
CN900
JK920
(HEADPHONE
P.C.B)
H600/W600
(TACT SWITCH (2)
P.C.B)
H920B/W920
CP900
VR900
Panasonic


H
I
J
K
L
M
N
CP1001
(DECK P.C.B)
CP1002
CN1001
W1002
CS1001
CS951
CS1002
CS971
H1001/W1001
JK501
CP501
(POWER P.C.B)
H500/W500B
CP500


O
P
Q
R
S
T
V
1
2
3
4
5
6
7
8
9
10
30
54
24
38
(SUB-TRANSFORMER P.C.B)
24
54
T502
JK500
W500B
54
CN502
W500B
24
24
CN501
T501
56
54
(AC TRANS P.C.B)
56
56
24
24
40
JK101
CN302
JK305
CN303
35
CN304
1
CN300
CN309
CN301
(MAIN P.C.B)
25
25

20.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEX0129	14P FFC	[M]
2	REEX0101	28P FFC	[M]
3	REEX0127	20P FFC	[M]
4	REEX0130	19P FFC	[M]
5	RGB0113-N	PANA BADGE	[M]
6	RGKX0070-S	CD LID	[M]
7	RGKX0071-AB	CD ORNAMENT	[MAVD]
8	RGLX0028-Q	POWER LIGHTING CHIP	[M]
9	RGLX0030-Q	DISC LIGHT CHIP	[M]
10	RGPX0038E-SL	FRONT PANEL	[MAVD]
11	RGRX0017G-AB	REAR PANEL	EG E
11	RGRX0017G-DB	REAR PANEL	EB
12	RGUX0368A-SB	POWER BUTTON	[MAVD]
13	RGUX0369Z-S	CD EJECT BUTTON	[MAVD]
14	RGUX0371-SB	DISC BUTTON	[MAVD]
15	RGUX0372-SB	DECK BUTTON	[MAVD]
16	RGUX0378Z-S	DECK EJECT BUTTON L	[MAVD]
17	RGUX0379Z-S	DECK EJECT BUTTON R	[MAVD]
18	RGUX0397Z-S	DISPLAY BUTTON	[MAVD]
19	RGUX0400-SB	AUXILIARY BUTTON	[MAVD]
20	RGUX0411-Q	AMAZING BUTTON	[M]
22	RGUX0412-SB	FUNCTION BUTTON	[MAVD]
23	RGWX0055-S	VOLUME KNOB	[M]
24	RHD30002-H	SCREW	[M]
25	RKA0059-K	LEG RUBBER	[M]
26	RKFX0083-SB	CASS LID (L)	[MAVD]
27	RKFX0084-SB	CASS LID (R)	[MAVD]
28	RKFX0085-KB	CASS. HOLDER (L)	[MAVD]
29	RKFX0086-KB	CASS. HOLDER (R)	[MAVD]
30	RKMX0057-S	TOP CABINET (BENT)	[M]
31	RKWX0148-AB	CASS WIN (L)	[MAVD]
32	RKWX0149-AB	CASS WIN (R)	[MAVD]
34	RMBX0016-1	CASS. OPEN SPRING	[M]
35	RMKX0053	BOTTOM CHASSIS	[MAVD]
36	RMKX0044-B	INNER CHASSIS	[MAVD]
37	RMKX0045-B	T-BRACKET	[MAVD]
38	RMNX0039-HB	SUB-TRANS SUPPORT	[MAVD]
39	RMNX0048	HOLDER	[M]
41	RSCX0052	SHIELD PLATE HEAD	[M]
42	RSCX0058	DECK SHIELD PLATE	[M]
43	RUS757ZAA	CASSETTE HALF SPRING	[M]
44	RXGX0001	DAMPER GEAR	[M]
45	RXXX0021	HEAT SINK UNIT	[M]
46	RYQX0040-SL	CONTROL BUTTON UNIT	[MAVD]
47	RYQX0042-S	JOY JOG UNIT	[M]
48	RKWX0157-A	FL ORNAMENT	[M]
49	SHE187-5	PCB SUPPORT (NO PIN)	[M]
50	XTB3+10J	SCREW	[M]
51	XTB3+10JFZ	SCREW	[M]
52	XTB3+20J	SCREW	[M]
53	XTBS26+10J	SCREW	[M]
54	XTBS3+8JFZ1	SCREW	[M]
55	XTW3+15T	SCREW	[M]
56	XTW3+8T	SCREW	[M]
57	RKWX0156	FL FILTER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
59	RMC0158-S	TR FIXTURE	[M]
61	RGUX0380Z-S	RDS BUTTON	[MAVD]
65	REXX0259	8P WIRE	[M]

20.4. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARDS	
	REPX0192D	CD SERVO P.C.B.	[M](RTL)
	REPX0232E	MAIN/TUNER P.C.B.	[M](RTL)
	REPX0254B	PANEL P.C.B.	[M](RTL)
	REPX0254B	HEADPHONE P.C.B.	[M](RTL)
	REPX0254B	TACT SWITCH (1) P.C.B.	[M](RTL)
	REPX0254B	TACT SWITCH (2) P.C.B.	[M](RTL)
	REPX0108	MECHANISM (DECK 1) P.C.B.	[M](RTL)
	REPX0108A	MECHANISM (DECK 2) P.C.B.	[M](RTL)
	REP2578A-N	CD LOADING P.C.B.	[M](RTL)
	REP2578A-N	CD DETACT P.C.B.	[M](RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M](RTL)
	REPX0198B	DECK P.C.B.	[M](RTL)
	REPX0253C	POWER P.CB.	[M](RTL)
	REPX0256C	AC TRANSFORMER P.C.B.	[M](RTL) EG
	REPX0256D	AC TRANSFORMER P.C.B.	[M](RTL) E/EB
	REPX0256C	SUB TRANSFORMER P.C.B.	[M](RTL) EG
	REPX0256D	SUB TRANSFORMER P.C.B.	[M](RTL) E/EB
		INTEGRATED CIRCUITS	
IC1	TA7291P	IC DRIVE	[M]
IC101	LA1833NMNTLM	IC IF & MPX	[M]
IC102	LC72131MDTRM	IC PLL	[M]
IC301	BH3874AKS2	IC ASP	[M]
IC302	M5218AP	IC BUFFER AMP	[M]
IC500	RSN3502C	IC HIC	[M] ⚠
IC600	M38B79MFA158	IC MICRO-PROCESSOR	[M]
IC601	BU2090AF-E2	IC I/O EXPANDER	[M]
IC701	AN8885SBE1	IC RFAMP	[M]
IC702	MN662790RSC	IC LSI	[M]
IC703	AN8739SBE2	IC 4CH DRIVER	[M]
IC951	0N2180RLC1	IC, PHOTO INTERRUPTER	[M]
IC971	0N2180RLC1	IC, PHOTO INTERRUPTER	[M]
IC990	LC72721NMTLM	IC RDS	[M]
IC1001	AN7348STA-E1	IC TAPE PB	[M]
IC1002	BU2090AF-E2	IC I/O EXPANDER	[M]
IC1003	BA4558FE2	IC BUFFER AMP	[M]
IC1004	BA7755A	IC R/P SELECT	[M]
		TRANSISTORS	
Q1	RVTDTC143EST	TRANSISTOR	[M]
Q101	2SC2058SPTA	TRANSISTOR	[M]
Q106	KRA102MTA	TRANSISTOR	[M] ⚠
Q110	2SC3311ARTA	TRANSISTOR	[M]
Q200	KTD1304TA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q250	KTD1304TA	TRANSISTOR	[M]
Q306	KRA102STA	TRANSISTOR	[M]
Q307	KRC111STA	TRANSISTOR	[M] ⚠
Q308	2SB621ARSTA	TRANSISTOR	[M] ⚠
Q350	2SB621ARSTA	TRANSISTOR	[M] ⚠
Q351	KRC102STA	TRANSISTOR	[M]
Q400	KTD1304TA	TRANSISTOR	[M]
Q450	KTD1304TA	TRANSISTOR	[M]
Q503	KTA1046	TRANSISTOR	[M]
Q504	KTC3199GRTA	TRANSISTOR	[M]
Q505	KTC3199GRTA	TRANSISTOR	[M]
Q506	KTC3199GRTA	TRANSISTOR	[M] ⚠
Q507	KTC3199GRTA	TRANSISTOR	[M]
Q509	KTA12710YTA	TRANSISTOR	[M]
Q510	KRA110MTA	TRANSISTOR	[M]
Q511	KTC3199GRTA	TRANSISTOR	[M]
Q512	KRA110MTA	TRANSISTOR	[M] ⚠
Q513	KTC32030YTA	TRANSISTOR	[M] ⚠
Q514	KTC3199GRTA	TRANSISTOR	[M]
Q515	KTC3199GRTA	TRANSISTOR	[M]
Q517	2SD2144STA	TRANSISTOR	[M] ⚠
Q518	2SA933SSTA	TRANSISTOR	[M] ⚠
Q519	KTA1046	TRANSISTOR	[M] ⚠
Q520	KTC2026	TRANSISTOR	[M] ⚠
Q570	KTC3205Y	TRANSISTOR	[MAVD] ⚠
Q571	KTC3199GRTA	TRANSISTOR	[M] ⚠
Q572	KRC102MTA	TRANSISTOR	[M]
Q600	KTA12710YTA	TRANSISTOR	[M] ⚠
Q601	KRC103MTA	TRANSISTOR	[M] ⚠
Q602	KRC102MTA	TRANSISTOR	[M] ⚠
Q603	2SA933SSTA	TRANSISTOR	[M] ⚠
Q604	KRC101MTA	TRANSISTOR	[M]
Q605	KRC101MTA	TRANSISTOR	[M]
Q606	KRC101MTA	TRANSISTOR	[M]
Q607	KTC3199GRTA	TRANSISTOR	[M]
Q608	KTC3199GRTA	TRANSISTOR	[M]
Q701	2SA1037AKSTX	TRANSISTOR	[M]
Q1001	KTC3199GRTA	TRANSISTOR	[M]
Q1003	2SD2144STA	TRANSISTOR	[M]
Q1004	2SD2144STA	TRANSISTOR	[M]
Q1005	2SD2144STA	TRANSISTOR	[M]
Q1007	KTC3875GRTA	TRANSISTOR	[M]
Q1008	KTC3875GRTA	TRANSISTOR	[M]
Q1009	KTC3875GRTA	TRANSISTOR	[M]
Q1010	KTC3875GRTA	TRANSISTOR	[M]
Q1011	KTC3875GRTA	TRANSISTOR	[M]
Q1012	KTD1304TA	TRANSISTOR	[M]
Q1013	KTD1304TA	TRANSISTOR	[M]
Q1014	2SC2412KT96R	TRANSISTOR	[M]
Q1015	2SC2412KT96R	TRANSISTOR	[M]
Q1016	KRA102STA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q1017	**KTD1146YTA**	**TRANSISTOR**	**[M]**
Q1018	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q1019	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q1020	**KTD1304TA**	**TRANSISTOR**	**[M]**
Q1021	**KTD1304TA**	**TRANSISTOR**	**[M]**
Q1022	**KRA102STA**	**TRANSISTOR**	**[M]**
Q1023	**KRA102STA**	**TRANSISTOR**	**[M]**
Q1024	**2SD2144STA**	**TRANSISTOR**	**[M]**
		DIODES	
D1	**GP1S94**	**DIODE**	**[M]**
D2	**MTZJ4R7BTA**	**DIODE**	**[M]**
D101	**UDZSTE175R1B**	**DIODE**	**[M]**
D307	**DAP202KT146**	**DIODE**	**[M]**
D308	**DAP202KT146**	**DIODE**	**[M]**
D309	**1SS355TE17**	**DIODE**	**[M]**
D310	**DAP202KT146**	**DIODE**	**[M]**
D312	**RL1N4003S-P**	**DIODE**	**[M]**
D313	**RL1N4003S-P**	**DIODE**	**[M]**
D314	**RL1N4003S-P**	**DIODE**	**[M]**
D315	**MA8300MTX**	**DIODE**	**[MAVD]**
D316	**RL1N4003S-P**	**DIODE**	**[M]**
D317	**UDZSTE179R1B**	**DIODE**	**[M]**
D318	**UDZSTE177R5B**	**DIODE**	**[M]**
D501	**1N5402BM21**	**DIODE**	**[M]** ⚠
D502	**1N5402BM21**	**DIODE**	**[M]** ⚠
D503	**1N5402BM21**	**DIODE**	**[M]** ⚠
D504	**1N5402BM21**	**DIODE**	**[M]** ⚠
D506	**RL1N4003S-P**	**DIODE**	**[M]** ⚠
D507	**RL1N4003S-P**	**DIODE**	**[M]** ⚠
D508	**RL1N4003S-P**	**DIODE**	**[M]** ⚠
D509	**RL1N4003S-P**	**DIODE**	**[M]** ⚠
D510	**RL1N4003S-P**	**DIODE**	**[M]**
D511	**RL1N4003S-P**	**DIODE**	**[M]**
D512	**RL1N4003S-P**	**DIODE**	**[M]**
D513	**RVD1SS133TA**	**DIODE**	**[M]**
D514	**RVD1SS133TA**	**DIODE**	**[M]**
D515	**MA165TA**	**DIODE**	**[M]**
D518	**MTZJ5R6BTA**	**DIODE**	**[M]**
D521	**MTZJ10BTA**	**DIODE**	**[M]**
D522	**RVD1SS133TA**	**DIODE**	**[M]**
D526	**MTZJ15CTA**	**DIODE**	**[M]**
D529	**RVD1SS133TA**	**DIODE**	**[M]**
D530	**RVD1SS133TA**	**DIODE**	**[M]**
D570	**1T3T**	**DIODE**	**[M]**
D571	**1T3T**	**DIODE**	**[M]**
D572	**MTZJ6R8BTA**	**DIODE**	**[M]**
D573	**RVD1SS133TA**	**DIODE**	**[M]**
D574	**1T3T**	**DIODE**	**[M]**
D575	**1T3T**	**DIODE**	**[M]**
D576	**1T3T**	**DIODE**	**[M]**
D577	**1T3T**	**DIODE**	**[M]**
D605	**SLI325URCT31**	**DIODE**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
D610	MA723TA	DIODE	[M]
D611	RVD1SS133TA	DIODE	[M]
D612	RVD1SS133TA	DIODE	[M]
D613	MA4020LTA	DIODE	[M]
D614	MA2C700A0F	DIODE	[MAVD]
D615	MA2C700A0F	DIODE	[MAVD]
D616	MA2C700A0F	DIODE	[MAVD]
D617	MA2C700A0F	DIODE	[MAVD]
D618	RVD1SS133TA	DIODE	[M]
D619	RVD1SS133TA	DIODE	[M]
D620	1SS291TA	DIODE	[M]
D621	1SS291TA	DIODE	[M]
D650	RVD1SS133TA	DIODE	[M]
D651	RVD1SS133TA	DIODE	[M]
D692	RVD1SS133TA	DIODE	[M]
D696	RVD1SS133TA	DIODE	[M]
D914	SLR325MCT31W	DIODE	[M]
D915	SLR325MCT31W	DIODE	[M]
D916	SLR325MCT31W	DIODE	[M]
D917	SLR325MCT31W	DIODE	[M]
D918	SLR325MCT31W	DIODE	[M]
D949	SLR325DCT31	DIODE	[M]
D951	MA165TA	DIODE	[M]
D971	MA165TA	DIODE	[M]
D990	MTZJ5R1BTA	DIODE	[M]
D1002	1SS355TE17	DIODE	[M]
D1003	1SS355TE17	DIODE	[M]
D1004	UDZTE173R6B	DIODE	[M]
		VARIABLE RESISTORS	
VR900	EVEKE2F2524B	VR VOLUME	[M]
		SWITCHES	
S701	RSH1A043-U	SW RESET	[M]
S900	EVQ21405R	SW CD MANAGER	[M]
S901	EVQ21405R	SW CD 1	[M]
S902	EVQ21405R	SW CD 2	[M]
S903	EVQ21405R	SW CD 3	[M]
S904	EVQ21405R	SW CD 4	[M]
S905	EVQ21405R	SW CD 5	[M]
S906	EVQ21405R	SW REC/STOP	[M]
S907	EVQ21405R	SW REC MODE	[M]
S908	EVQ21405R	SW TAPE EDIT	[M]
S909	EVQ21405R	SW TUNE DOWN	[M]
S910	EVQ21405R	SW FM MODE/BP	[M]
S911	EVQ21405R	SW MEMORY	[M]
S912	EVQ21405R	SW TUNE MODE	[M]
S913	EVQ21405R	SW TUNE UP	[M]
S920	EVQ21405R	SW CD EJECT	[M]
S940	EVQ21405R	SW AUX	[M]
S941	EVQ21405R	SW TUNER	[M]
S942	EVQ21405R	SW TAPE	[M]
S943	EVQ21405R	SW CD	[M]
S945	EVQ21405R	SW SUPER SOUND EQ	[M]
S950	EVQ21405R	SW DECK 2	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S951	RSH1A018-3U	SW MODE	[M]
S952	RSH1A019-2U	SW HALF	[M]
S953	RSH1A019-2U	SW CR02	[M]
S956	EVQ21405R	SW POWER	[M]
S958	EVQ21405R	SW PLAY/REC TIMER	[M]
S959	EVQ21405R	SW CLOCK/TIMER	[M]
S960	EVQ21405R	SW RDS	[M]
S961	EVQ21405R	SW DISPLAY/DEMO	[M]
S962	EVQ21405R	SW DECK 1	[M]
S971	RSH1A018-3U	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]
S973	RSH1A019-2U	SW CR02	[M]
S974	RSH1A019-2U	SW RECINH_F	[M]
S975	RSH1A019-2U	SW RECINH_R	[M]
		SWITCHES	
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW	[M]
SW4	RSH1A91ZA-A	SW CD	[M]
SW5	RSP1A017-A	SW LOCK	[M]
SW600	ESE24SV2	SW JOY JOG	[M]
		CONNECTORS	
CN1	RJS1A9414	FF CONNECTOR	[M]
CN300	RJU057G12	12P P2 MQ CONNECTOR	[M]
CN301	RJU057G12	12P P2 MQ CONNECTOR	[M]
CN302	RJS1A9428-1	28P FFC CONNECTOR	[M]
CN303	RJS1A9420	20P FFC CONNECTOR	[M]
CN304	RJS1A5210	10P WIRE HOLDER	[M]
CN309	RJS1A9414-1	14P CONNECTOR	[M]
CN501	RJT029W008-1	8P SIDE CONNECTOR	[M]
CN502	RJP6G18ZA	SOCKET	[M]
CN701	RJS2A6016	16P FFC CONNECTOR	[M]
CN702	RJS1A6719-1Q	19P FFC CONNECTOR	[M]
CN900	RJT066H12F	12P BTB CONNECTOR	[M]
CN1001	RJS8T7ZA	8P MOLEX	[M]
CP500	RJT057G12	12P P2 MQ CONNECTOR	[M]
CP501	RJT057G12	12P P2 MQ CONNECTOR	[M]
CP605	RJS1A9420	20P FFC CONNECTOR	[M]
CP606	RJS1A6219-1	19P FFC CONNECTOR	[M]
CP607	RJS1A9428-1	28P FFC CONNECTOR	[M]
CP900	RJU066H12M	12P BTB CONNECTOR	[M]
CP1001	RJT071K09A	9P B/B CONNECTOR	[M]
CP1002	RJT071K09A	9P B/B CONNECTOR	[M]
CS951	RJU071H09M1	CONNECTOR	[M]
CS971	RJU071H09M1	CONNECTOR	[M]
CS1001	RJS1A6805-J	5P CONNECTOR SOCKET	[M]
CS1002	RJS1A6805-J	5P CONNECTOR SOCKET	[M]
		COILS & TRANSFORMERS	
L102	RLQB1R0KTD-D	INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L500	RLQZ271M	COIL	[M] ⚠
L501	RLQYR73MW-B	CHOKE COIL	[MAVD]
L502	RLQYR73MW-B	CHOKE COIL	[MAVD]
L603	RLQB3R3JTD-D	COIL	[M]
L605	RLQB101JTD-D	INDUCTOR	[M]
L920	ELEXT101KA04	INDUCTOR	[MAVD]
L921	RLQB101JTD-D	INDUCTOR	[M]
L922	ELEXT100KA04	INDUCTOR	[MAVD]
L990	RLQB101JTD-D	INDUCTOR	[M]
L991	RLQB101JTD-D	INDUCTOR	[M]
L1001	RLQB470JTD-D	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
T501	RTP2N3B014	MAIN TRANSFORMER	[M] ⚠
T502	RTP1H3E002	BACK UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z101	RLA2Z007-T	COIL	[M]
Z102	RLI2Z021M-T	AM IF BLOCK	[M]
Z120	ENV17290G1Y	FM TUNER PACK	[M]
Z501	ERZV10V511CS	ZENER	[M] ⚠
Z940	RCDGP1U26XV	LOW CURRENT 1MA	[M]
Z971	EXBF7L355SYV	RADA RESISTOR	[M]
Z1001	RGSD12A1445T	SENSOR	[M]
Z1002	RGSD12A1445T	SENSOR	[M]
		CERAMIC FILTERS	
CF201	RLFFETWND01M	FM CF	[M]
CF202	RLFFETWND01M	FM CF	[M]
		RELAY	
RL502	RSY0040M-0	PRIMAY RELAY	[M] ⚠
		OSCILLATORS	
X102	RLFDFT22DD	DISCRIMINATOR	[M]
X103	RSXC7M20S05T	CRYSTAL OSCILLATOR	[M]
X600	RSXZ4M19D01T	CRYSTAL OSCILLATOR	[M]
X601	RSXD32K7S02	CRYSTAL OSCILLATOR	[M]
X701	RSXZ16M9M08T	CERAMIC OSCILLATOR	[M]
X990	RSXC4M33S02T	CERAMIC OSCILLATOR	[M]
		DISPLAY TUBE	
FL600	RSL0314-F	FL	[M]
		FUSES	
F1	XBA2C16TB0	1.6A PRIMAY FUSE	[M] ⚠
		FUSE HOLDERS	

Ref. No.	Part No.	Part Name & Description	Remarks
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
		HOLDERS	
H500	RJS1A5508	WIRE HOLDER	[M]
H600	RMR0317	8P CABLE HOLDER	[M]
H601	RMR0315	6P CABLE HOLDER	[M]
H920A	RMR0315	6P CABLE HOLDER	[M]
H920B	RMR0315	6P CABLE HOLDER	[M]
H940A	RMR0318	9P CABLE HOLDER	[M]
H940B	RMR0318	9P CABLE HOLDER	[M]
H1001	RMR0319	10P CABLE HOLDER	[M]
		JACKS	
JK101	RJH8304N	JK ANTENNA	[M]
JK305	RJH2213N-1	JK AUX	[M]
JK500	SJS9236-J	JK AC INLET	[M] ⚠
JK501	RJR0054B-L	JK SPEAKER	[M]
JK920	RJJ37TK07-X	JK HP/MIC	[M]
		EARTH TERMINAL	
E500	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REE0854	PRI WIRE YELLOW	[M]EB
W1	REEX0089	WIRE	[M]EG E
W1	REZ1023-1	4P WIRE	[M]
W2	REE0955	AC IN (W1)	[M]
W2	REZ1024	3P WIRE	[M]
W500B	REXX0202	2P STANDBY WIRE	[M]
W600	RWJ0208155RX	8P PANEL TO DECK	[M]
W601	REXX0253	6P WIRE	[M]
W920	RWJ0206250XX	6P (2) FLAT WIRE	[M]
W940	RWJ1109140RR	9P WIRE	[M]
W1001	RWJ8010160RX	10P WIRE	[M]
W1002	RWJ0102065CK	WIRE	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R103	ERJ3GEYJ271V	270 1/16W	[M]
R104	ERJ3GEYJ102V	1K 1/16W	[M]
R105	ERJ3GEYJ471V	470 1/16W	[M]
R106	ERJ3GEYJ474V	470K 1/16W	[M]
R107	ERJ3GEYJ331V	330 1/16W	[M]
R110	ERJ3GEYJ102V	1K 1/16W	[M]
R111	ERJ3GEYJ391V	390 1/16W	[M]
R112	ERJ3GEYJ104V	100K 1/16W	[M]
R113	ERJ3GEYJ103V	10K 1/16W	[M]
R114	ERJ3GEYJ562V	5.6K 1/16W	[M]
R115	ERJ3GEYJ561V	560 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R116	ERJ3GEYJ102V	1K 1/16W	[M]
R117	ERJ3GEYJ473V	47K 1/16W	[M]
R118	ERJ3GEYJ332V	3.3K 1/16W	[M]
R119	ERJ3GEYJ123V	12K 1/16W	[M]
R120	ERJ3GEYJ473V	47K 1/16W	[M]
R121	ERJ3GEYJ223V	22K 1/16W	[M]
R122	ERJ3GEYJ272V	2.7K 1/16W	[M]
R123	ERJ3GEYJ683V	68K 1/16W	[M]
R124	ERJ3GEYJ330V	33 1/16W	[M]
R125	ERJ3GEYJ471V	470 1/16W	[M]
R126	ERJ3GEYJ102V	1K 1/16W	[M]
R127	ERJ3GEYJ471V	470 1/16W	[M]
R128	ERJ3GEYJ820V	82 1/16W	[M]
R129	ERJ3GEYJ273V	27K 1/16W	[M]
R130	ERJ3GEYJ103V	10K 1/16W	[M]
R131	ERJ3GEYJ680V	68 1/16W	[M]
R132	ERJ3GEYJ103V	10K 1/16W	[M]
R133	ERJ3GEYJ102V	1K 1/16W	[M]
R134	ERJ3GEYJ471V	470 1/16W	[M]
R135	ERJ3GEYJ102V	1K 1/16W	[M]
R136	ERJ3GEYJ102V	1K 1/16W	[M]
R137	ERJ3GEYJ102V	1K 1/16W	[M]
R138	ERJ3GEYJ332V	3.3K 1/16W	[M]
R139	ERJ3GEYJ223V	22K 1/16W	[M]
R140	ERJ3GEYJ223V	22K 1/16W	[M]
R141	ERJ3GEYJ682V	6.8K 1/16W	[M]
R142	ERJ3GEYJ682V	6.8K 1/16W	[M]
R143	ERJ3GEYJ223V	22K 1/16W	[M]
R145	ERJ3GEYJ104V	100K 1/16W	[M]
R146	ERJ3GEYJ104V	100K 1/16W	[M]
R151	ERJ3GEYJ820V	82 1/16W	[M]
R152	ERJ3GEY0R00V	0 1/16W	[M]
R201	ERJ3GEYJ272V	2.7K 1/16W	[M]
R202	ERJ3GEYJ103V	10K 1/16W	[M]
R207	ERJ3GEYJ152V	1.5K 1/16W	[M]
R208	ERJ3GEYJ103V	10K 1/16W	[M]
R209	ERJ3GEYJ473V	47K 1/16W	[M]
R210	ERJ3GEYJ102V	1K 1/16W	[M]
R211	ERJ3GEYJ222V	2.2K 1/16W	[M]
R212	ERJ3GEYJ472V	4.7K 1/16W	[M]
R213	ERJ3GEYJ272V	2.7K 1/16W	[M]
R214	ERJ3GEYJ103V	10K 1/16W	[M]
R215	ERJ3GEYJ223V	22K 1/16W	[M]
R220	ERJ3GEYJ333V	33K 1/16W	[M]
R221	ERJ3GEYJ102V	1K 1/16W	[M]
R222	ERJ3GEYJ472V	4.7K 1/16W	[M]
R223	ERJ3GEYJ473V	47K 1/16W	[M]
R224	ERJ3GEYJ153V	15K 1/16W	[M]
R225	ERJ3GEYJ152V	1.5K 1/16W	[M]
R226	ERJ3GEYJ101V	100 1/16W	[M]
R227	ERJ3GEYJ682V	6.8K 1/16W	[M]
R233	ERJ3GEYJ223V	22K 1/16W	[M]
R248	ERJ3GEYJ390V	39 1/16W	[M]
R249	ERJ3GEYJ390V	39 1/16W	[M]
R250	ERJ3GEYJ121V	120 1/16W	[M]
R251	ERJ3GEYJ121V	120 1/16W	[M]
R253	ERJ3GEYJ223V	22K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R300	ERJ3GEYJ472V	4.7K 1/16W	[M]
R301	ERJ3GEYJ104V	100K 1/16W	[M]
R302	ERJ3GEYJ154V	150K 1/16W	[M]
R303	ERJ3GEYJ103V	10K 1/16W	[M]
R304	ERDS1FVJ470T	47 1/2W	[M]
R305	ERDS1FVJ470T	47 1/2W	[M]
R313	ERJ3GEYJ393V	39K 1/16W	[M]
R316	ERJ3GEYJ153V	15K 1/16W	[M]
R328	ERJ3GEYJ333V	33K 1/16W	[M]
R329	ERJ3GEYJ105V	1M 1/16W	[M]
R330	ERJ3GEYJ151V	150 1/16W	[M]
R331	ERJ3GEYJ472V	4.7K 1/16W	[M]
R332	ERD2FCVJ4R7T	4.7 1/4W	[M]
R345	ERJ3GEYJ221V	220 1/16W	[M]
R346	ERJ3GEYJ223V	22K 1/16W	[M]
R347	ERJ3GEYJ123V	12K 1/16W	[M]
R349	ERJ3GEYJ103V	10K 1/16W	[M]
R350	ERJ3GEYJ102V	1K 1/16W	[M]
R351	ERJ3GEYJ103V	10K 1/16W	[M]
R353	ERJ3GEYJ103V	10K 1/16W	[M]
R354	ERJ3GEYJ123V	12K 1/16W	[M]
R355	ERJ3GEYJ223V	22K 1/16W	[M]
R358	ERJ3GEYJ473V	47K 1/16W	[M]
R359	ERJ3GEYJ473V	47K 1/16W	[M]
R367	ERJ3GEYJ103V	10K 1/16W	[M]
R371	ERJ3GEYJ472V	4.7K 1/16W	[M]
R372	ERJ3GEYJ103V	10K 1/16W	[M]
R373	ERJ3GEYJ153V	15K 1/16W	[M]
R374	ERJ3GEYJ153V	15K 1/16W	[M]
R375	ERJ3GEYJ153V	15K 1/16W	[M]
R378	ERJ3GEYJ273V	27K 1/16W	[M]
R379	ERJ3GEYJ472V	4.7K 1/16W	[M]
R380	ERDS1FVJ470T	47 1/2W	[M]
R381	ERJ3GEYJ473V	47K 1/16W	[M]
R382	ERJ3GEYJ473V	47K 1/16W	[M]
R384	ERJ3GEYJ473V	47K 1/16W	[M]
R385	ERJ3GEYJ473V	47K 1/16W	[M]
R391	ERDS1FVJ470T	47 1/2W	[M]
R392	ERDS1FVJ470T	47 1/2W	[M]
R401	ERJ3GEYJ272V	2.7K 1/16W	[M]
R402	ERJ3GEYJ103V	10K 1/16W	[M]
R407	ERJ3GEYJ152V	1.5K 1/16W	[M]
R408	ERJ3GEYJ103V	10K 1/16W	[M]
R409	ERJ3GEYJ473V	47K 1/16W	[M]
R410	ERJ3GEYJ102V	1K 1/16W	[M]
R411	ERJ3GEYJ222V	2.2K 1/16W	[M]
R412	ERJ3GEYJ472V	4.7K 1/16W	[M]
R413	ERJ3GEYJ272V	2.7K 1/16W	[M]
R414	ERJ3GEYJ103V	10K 1/16W	[M]
R415	ERJ3GEYJ223V	22K 1/16W	[M]
R420	ERJ3GEYJ333V	33K 1/16W	[M]
R421	ERJ3GEYJ102V	1K 1/16W	[M]
R422	ERJ3GEYJ472V	4.7K 1/16W	[M]
R423	ERJ3GEYJ473V	47K 1/16W	[M]
R424	ERJ3GEYJ153V	15K 1/16W	[M]
R425	ERJ3GEYJ152V	1.5K 1/16W	[M]
R426	ERJ3GEYJ101V	100 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R427	ERJ3GEYJ682V	6.8K 1/16W	[M]
R433	ERJ3GEYJ223V	22K 1/16W	[M]
R448	ERJ3GEYJ390V	39 1/16W	[M]
R449	ERJ3GEYJ390V	39 1/16W	[M]
R450	ERJ3GEYJ121V	120 1/16W	[M]
R451	ERJ3GEYJ121V	120 1/16W	[M]
R453	ERJ3GEYJ223V	22K 1/16W	[M]
R500	ERD2FCVG270T	27 1/4W	[M]
R501	ERDS1FVJ150T	15 1/2W	[M]
R502	ERDS2TJ332T	3.3K 1/4W	[M]
R503	ERDS2TJ272T	2.7K 1/4W	[M]
R504	ERDS2TJ102T	1K 1/4W	[M]
R505	ERDS2TJ102T	1K 1/4W	[M]
R506	ERDS2TJ272T	2.7K 1/4W	[M]
R507	ERDS2TJ561T	560 1/4W	[M]
R508	ERDS2TJ562T	5.6K 1/4W	[M]
R510	ERDS2TJ2R2T	2.2 1/4W	[M]
R511	ERDS2TJ683T	68K 1/4W	[M]
R512	ERDS2TJ103T	10K 1/4W	[M]
R513	ERDS2TJ683T	68K 1/4W	[M]
R514	ERDS2TJ222T	2.2K 1/4W	[M]
R515	ERDS2TJ392T	3.9K 1/4W	[M]
R517	ERDS2TJ331T	330 1/4W	[M]
R518	ERDS2TJ683T	68K 1/4W	[M]
R519	ERDS2TJ101T	100 1/4W	[M]
R520	ERD25FVJ4R7T	4.7 1/4W	[M]
R522	ERDS2TJ562T	5.6K 1/4W	[M]
R523	ERDS2TJ683T	68K 1/4W	[M]
R524	RSFMB10KT-L	FUSE PROTECTOR	[M] ⚠
R525	ERDS2TJ334T	330K 1/4W	[M]
R526	ERDS2TJ223T	22K 1/4W	[M]
R527	ERDS2TJ2R2T	2.2 1/4W	[M]
R528	ERDS2TJ2R2T	2.2 1/4W	[M]
R529	ERDS2TJ2R2T	2.2 1/4W	[M]
R530	ERDS2TJ122T	1.2K 1/4W	[M]
R531	ERDS2TJ103T	10K 1/4W	[M]
R532	ERDS2TJ331T	330 1/4W	[M]
R533	ERDS2TJ273T	27K 1/4W	[M]
R534	ERDS2TJ273T	27K 1/4W	[M]
R535	ERDS2TJ102T	1K 1/4W	[M]
R536	ERDS2TJ102T	1K 1/4W	[M]
R537	ERDS2TJ823T	82K 1/4W	[M]
R538	ERDS2TJ823T	82K 1/4W	[M]
R539	ERDS2TJ103T	10K 1/4W	[M]
R540	ERDS2TJ823T	82K 1/4W	[M]
R541	ERDS2TJ104T	100K 1/4W	[M]
R542	ERDS2TJ154T	150K 1/4W	[M]
R543	ERDS2TJ151T	150 1/4W	[M]
R544	ERDS1FVJ100T	10 1/2W	[M]
R545	ERDS1FVJ100T	10 1/2W	[M]
R546	ERDS2TJ104T	100K 1/4W	[M]
R547	ERDS2TJ151T	150 1/4W	[M]
R549	ERDS2TJ222T	2.2K 1/4W	[M]
R550	ERDS2TJ151T	150 1/4W	[M]
R551	ERDS1FVJ3R9T	3.9 1/2W	[M]
R552	ERDS1FVJ3R9T	3.9 1/2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R553	ERDS1FVJ3R9T	3.9 1/2W	[M]
R554	ERDS1FVJ3R9T	3.9 1/2W	[M]
R555	ERDS1FVJ3R9T	3.9 1/2W	[M]
R556	ERDS1FVJ2R2T	2.2 1/2W	[M]
R557	ERDS1FVJ2R2T	2.2 1/2W	[M]
R558	ERDS2TJ563T	56K 1/4W	[M]
R559	ERDS2TJ104T	100K 1/4W	[M]
R560	ERDS2TJ104T	100K 1/4W	[M]
R566	ERDS2TJ100T	10 1/4W	[M]
R567	ERDS2TJ100T	10 1/4W	[M]
R568	ERDS2TJ332T	3.3K 1/4W	[M]
R580	ERDS2TJ821T	820 1/4W	[M]
R581	ERDS2TJ151T	150 1/4W	[M]
R582	ERDS1FVJ220T	22 1/2W	[M]
R583	ERDS1FVJ180T	18 1/2W	[M]
R584	ERDS1FVJ180T	18 1/2W	[M]
R586	RSFMB40KT-L	FUSE PROTECTOR	[M] ⚠
R588	ERDS2TJ102T	1K 1/4W	[M]
R589	ERDS2TJ103T	10K 1/4W	[M]
R590	ERDS2TJ103T	10K 1/4W	[M]
R600	ERDS2TJ472T	4.7K 1/4W	[M]
R601	ERDS2TJ472T	4.7K 1/4W	[M]
R602	ERDS2TJ472T	4.7K 1/4W	[M]
R605	ERDS2TJ392T	3.9K 1/4W	[M]
R611	ERDS2TJ104T	100K 1/4W	[M]
R612	ERDS2TJ104T	100K 1/4W	[M]
R613	ERDS2TJ104T	100K 1/4W	[M]
R614	ERDS2TJ104T	100K 1/4W	[M]
R615	ERDS2TJ104T	100K 1/4W	[M]
R616	ERDS2TJ104T	100K 1/4W	[M]
R617	ERDS2TJ104T	100K 1/4W	[M]
R618	ERDS2TJ104T	100K 1/4W	[M]
R619	ERDS2TJ104T	100K 1/4W	[M]
R620	ERDS2TJ104T	100K 1/4W	[M]
R621	ERDS2TJ104T	100K 1/4W	[M]
R622	ERDS2TJ104T	100K 1/4W	[M]
R623	ERDS2TJ152T	1.5K 1/4W	[M]
R624	ERDS2TJ223T	22K 1/4W	[M]
R625	ERDS2TJ102T	1K 1/4W	[M]
R626	ERDS2TJ102T	1K 1/4W	[M]
R628	ERDS2TJ103T	10K 1/4W	[M]
R629	ERDS2TJ103T	10K 1/4W	[M]
R630	ERDS2TJ103T	10K 1/4W	[M]
R631	ERDS2TJ101T	100 1/4W	[M]
R632	ERDS2TJ101T	100 1/4W	[M]
R633	ERDS2TJ101T	100 1/4W	[M]
R634	ERDS2TJ102T	1K 1/4W	[M]
R635	ERDS2TJ102T	1K 1/4W	[M]
R636	ERDS2TJ101T	100 1/4W	[M]
R637	ERDS2TJ223T	22K 1/4W	[M]
R638	ERDS2TJ681T	680 1/4W	[M]
R639	ERDS2TJ101T	100 1/4W	[M]
R640	ERDS2TJ101T	100 1/4W	[M]
R641	ERDS2TJ473T	47K 1/4W	[M]
R642	ERDS2TJ223T	22K 1/4W	[M]
R643	ERDS2TJ103T	10K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R644	ERDS2TJ471T	470 1/4W	[M]
R645	ERDS2TJ102T	1K 1/4W	[M]
R646	ERDS2TJ223T	22K 1/4W	[M]
R647	ERDS2TJ101T	100 1/4W	[M]
R648	ERDS2TJ101T	100 1/4W	[M]
R649	ERDS2TJ472T	4.7K 1/4W	[M]
R650	ERDS2TJ474T	470K 1/4W	[M]
R651	ERDS2TJ680T	68 1/4W	[M]
R652	ERDS2TJ680T	68 1/4W	[M]
R653	ERDS2TJ472T	4.7K 1/4W	[M]
R654	ERDS2TJ472T	4.7K 1/4W	[M]
R655	ERDS2TJ472T	4.7K 1/4W	[M]
R656	ERDS2TJ103T	10K 1/4W	[M]
R657	ERDS2TJ102T	1K 1/4W	[M]
R658	ERDS2TJ103T	10K 1/4W	[M]
R659	ERDS2TJ103T	10K 1/4W	[M]
R660	ERDS2TJ103T	10K 1/4W	[M]
R661	ERDS2TJ472T	4.7K 1/4W	[M]
R662	ERDS2TJ103T	10K 1/4W	[M]
R663	ERDS2TJ562T	5.6K 1/4W	[M]
R664	ERDS2TJ101T	100 1/4W	[M]
R665	ERDS2TJ101T	100 1/4W	[M]
R666	ERDS2TJ101T	100 1/4W	[M]
R667	ERDS2TJ562T	5.6K 1/4W	[M]
R668	ERDS2TJ562T	5.6K 1/4W	[M]
R669	ERDS2TJ562T	5.6K 1/4W	[M]
R670	ERDS2TJ104T	100K 1/4W	[M]
R671	ERDS2TJ104T	100K 1/4W	[M]
R672	ERDS2TJ104T	100K 1/4W	[M]
R673	ERDS2TJ223T	22K 1/4W	[M]
R674	ERDS2TJ102T	1K 1/4W	[M]
R675	ERDS2TJ472T	4.7K 1/4W	[M]
R676	ERDS2TJ472T	4.7K 1/4W	[M]
R677	ERDS2TJ681T	680 1/4W	[M]
R678	ERDS2TJ334T	330K 1/4W	[M]
R679	ERDS2TJ106T	10M 1/4W	[M]
R680	ERDS2TJ103T	10K 1/4W	[M]
R681	ERDS2TJ103T	10K 1/4W	[M]
R682	ERDS2TJ123T	12K 1/4W	[M]
R683	ERDS2TJ223T	22K 1/4W	[M]
R684	ERDS2TJ104T	100K 1/4W	[M]
R686	ERDS2TJ562T	5.6K 1/4W	[M]
R687	ERDS2TJ102T	1K 1/4W	[M]
R690	ERDS2TJ101T	100 1/4W	[M]
R691	ERDS2TJ473T	47K 1/4W	[M]
R692	ERDS2TJ473T	47K 1/4W	[M]
R693	ERDS2TJ473T	47K 1/4W	[M]
R694	ERDS2TJ473T	47K 1/4W	[M]
R695	ERDS2TJ473T	47K 1/4W	[M]
R696	ERDS2TJ102T	1K 1/4W	[M]
R697	ERDS2TJ473T	47K 1/4W	[M]
R699	ERDS2TJ103T	10K 1/4W	[M]
R701	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R702	ERJ3GEYJ103V	10K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	ERJ3GEYJ154V	150K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R707	ERJ3GEYJ393V	39K 1/16W	[M]
R708	ERJ3GEYJ223V	22K 1/16W	[M]
R709	ERJ3GEYJ473V	47K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERJ3GEYJ221V	220 1/16W	[M]
R714	ERJ3GEY0R00V	0 1/16W	[M]
R715	ERJ3GEYJ102V	1K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R721	ERJ3GEYJ101V	100 1/16W	[M]
R723	ERJ3GEYJ682V	6.8K 1/16W	[M]
R724	ERJ6GEYJ183V	18K 1/10W	[M]
R725	ERJ3GEYJ391V	390 1/16W	[M]
R727	ERJ3GEYJ392V	3.9K 1/16W	[M]
R728	ERJ3GEYJ392V	3.9K 1/16W	[M]
R729	ERJ3GEYJ392V	3.9K 1/16W	[M]
R731	ERJ6GEYJ682V	6.8K 1/10W	[M]
R735	ERJ6GEYJ101V	100 1/10W	[M]
R736	ERJ3GEYJ101V	100 1/16W	[M]
R741	ERJ3GEYJ473V	47K 1/16W	[M]
R742	ERJ6GEYJ224V	220K 1/10W	[M]
R744	ERJ3GEYJ124V	120K 1/16W	[M]
R749	ERJ3GEYJ472V	4.7K 1/16W	[M]
R750	ERJ6GEYJ4R7V	4.7 1/10W	[M]
R753	ERJ3GEYJ100V	10 1/16W	[M]
R900	ERDS2TJ223T	22K 1/4W	[M]
R901	ERDS2TJ102T	1K 1/4W	[M]
R902	ERDS2TJ102T	1K 1/4W	[M]
R903	ERDS2TJ122T	1.2K 1/4W	[M]
R904	ERDS2TJ182T	1.8K 1/4W	[M]
R905	ERDS2TJ222T	2.2K 1/4W	[M]
R906	ERDS2TJ102T	1K 1/4W	[M]
R907	ERDS2TJ102T	1K 1/4W	[M]
R908	ERDS2TJ122T	1.2K 1/4W	[M]
R909	ERDS2TJ182T	1.8K 1/4W	[M]
R910	ERDS2TJ222T	2.2K 1/4W	[M]
R911	ERDS2TJ272T	2.7K 1/4W	[M]
R912	ERDS2TJ472T	4.7K 1/4W	[M]
R913	ERDS2TJ682T	6.8K 1/4W	[M]
R914	ERDS2TJ471T	470 1/4W	[M]
R915	ERDS2TJ471T	470 1/4W	[M]
R916	ERDS2TJ471T	470 1/4W	[M]
R917	ERDS2TJ471T	470 1/4W	[M]
R918	ERDS2TJ471T	470 1/4W	[M]
R919	ERDS2TJ123T	12K 1/4W	[M]
R920	ERDS2TJ683T	68K 1/4W	[M]
R940	ERDS2TJ272T	2.7K 1/4W	[M]
R941	ERDS2TJ472T	4.7K 1/4W	[M]
R942	ERDS2TJ682T	6.8K 1/4W	[M]
R943	ERDS2TJ103T	10K 1/4W	[M]
R944	ERDS2TJ223T	22K 1/4W	[M]
R945	ERDS2TJ683T	68K 1/4W	[M]
R949	ERDS2TJ471T	470 1/4W	[M]
R950	ERDS2TJ103T	10K 1/4W	[M]
R951	ERDS2TJ223T	22K 1/4W	[M]
R952	ERDS2TJ102T	1K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R953	ERDS2TJ102T	1K 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R954	ERDS2TJ122T	1.2K 1/4W	[M]
R955	ERDS2TJ182T	1.8K 1/4W	[M]
R956	ERDS2TJ222T	2.2K 1/4W	[M]
R957	ERDS2TJ272T	2.7K 1/4W	[M]
R958	ERDS2TJ472T	4.7K 1/4W	[M]
R959	ERDS2TJ682T	6.8K 1/4W	[M]
R960	ERDS2TJ103T	10K 1/4W	[M]
R961	ERDS2TJ223T	22K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R990	ERDS2TJ104T	100K 1/4W	[M]
R991	ERDS2TJ104T	100K 1/4W	[M]
R992	ERDS2TJ102T	1K 1/4W	[M]
R993	ERDS2TJ102T	1K 1/4W	[M]
R994	ERDS2TJ121T	120 1/4W	[M]
R995	ERDS2TJ102T	1K 1/4W	[M]
R996	ERDS2TJ103T	10K 1/4W	[M]
R998	ERDS2TJ122T	1.2K 1/4W	[M]
R999	ERDS2TJ102T	1K 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1006	ERJ3GEYJ102V	1K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1020	ERJ3GEYJ470V	47 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEYJ563V	56K 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEYJ104V	100K 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	ERJ3GEYJ101V	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1036	ERJ3GEYJ470V	47 1/16W	[M]
R1037	ERJ3GEYJ104V	100K 1/16W	[M]
R1038	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1039	ERJ3GEYJ153V	15K 1/16W	[M]
R1040	ERJ3GEYJ563V	56K 1/16W	[M]
R1045	ERJ3GEYJ104V	100K 1/16W	[M]
R1046	ERJ3GEYJ104V	100K 1/16W	[M]
R1047	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1048	ERJ3GEYJ102V	1K 1/16W	[M]
R1049	ERJ3GEYJ105V	1M 1/16W	[M]
R1050	ERJ3GEYJ105V	1M 1/16W	[M]
R1051	ERJ3GEYJ221V	220 1/16W	[M]
R1052	ERJ3GEYJ221V	220 1/16W	[M]
R1053	ERJ3GEYJ681V	680 1/16W	[M]
R1054	ERJ3GEYJ681V	680 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1056	ERJ3GEYJ221V	220 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1058	ERJ3GEYJ272V	2.7K 1/16W	[M]
R1059	ERJ3GEYJ103V	10K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1061	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R1062	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R1063	ERJ3GEYJ102V	1K 1/16W	[M]
R1064	ERJ3GEYJ102V	1K 1/16W	[M]
R1065	ERJ3GEYJ102V	1K 1/16W	[M]
R1066	ERJ3GEYJ102V	1K 1/16W	[M]
R1067	ERJ3GEYJ153V	15K 1/16W	[M]
R1068	ERJ3GEYJ153V	15K 1/16W	[M]
R1069	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1070	ERJ3GEYJ103V	10K 1/16W	[M]
R1071	ERJ3GEYJ103V	10K 1/16W	[M]
R1072	ERJ3GEYJ331V	330 1/16W	[M]
R1073	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1074	ERJ3GEYJ823V	82K 1/16W	[M]
R1075	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1076	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1077	ERJ3GEYJ393V	39K 1/16W	[M]
R1078	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1079	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1080	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1081	ERJ3GEYJ102V	1K 1/16W	[M]
R1082	ERJ3GEYJ393V	39K 1/16W	[M]
R1083	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1088	ERJ3GEYJ223V	22K 1/16W	[M]
R1089	ERJ3GEYJ223V	22K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1092	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1093	ERJ3GEYJ102V	1K 1/16W	[M]
R1094	ERJ3GEYJ102V	1K 1/16W	[M]
R1095	ERJ3GEYJ104V	100K 1/16W	[M]
R1096	ERJ3GEYJ104V	100K 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
		CAPACITORS	
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C101	ECUV1E103KBV	0.01 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C102	ECEA1CKA100B	10 16V	[M]
C103	ECUV1E103KBV	0.01 25V	[M]
C104	ECUV1H102KBV	1000P 50V	[M]
C106	ECUV1E103KBV	0.01 25V	[M]
C107	ECUV1E473ZFV	0.047 25V	[M]
C108	ECUV1H080DCV	8P 50V	[M]
C109	ECUV1H102KBV	1000P 50V	[M]
C110	ECUV1E103KBV	0.01 25V	[M]
C111	ECEA1HKA4R7B	4.7 50V	[M]
C112	ECUV1E103KBV	0.01 25V	[M]
C113	ECUV1H102KBV	1000P 50V	[M]
C114	ECEA1HKA3R3B	3.3 50V	[M]
C115	ECEA1HKA4R7B	4.7 50V	[M]
C116	ECUV1C333KBV	0.033 16V	[M]
C117	ECUV1E103KBV	0.01 25V	[M]
C118	ECUV1E103KBV	0.01 25V	[M]
C119	ECQP2A681JZT	680P 100V	[M]
C120	ECEA1CKA100B	10 16V	[M]
C121	ECEA1HKAR47B	0.47 50V	[M]
C122	ECEA1HKA010B	1 50V	[M]
C123	ECEA1HKA010B	1 50V	[M]
C124	ECUV1H101KCV	100P 50V	[M]
C125	ECEA1CKA220B	22 16V	[M]
C126	ECUV1C105ZFN	1 16V	[M]
C127	ECEA1CKA220B	22 16V	[M]
C129	ECEA0JKA101B	100 6.3V	[M]
C130	ECEA0JKA101B	100 6.3V	[M]
C131	ECUV1H151JCV	150P 50V	[M]
C132	ECUV1H102KBV	1000P 50V	[M]
C133	ECUV1H270JCV	27P 50V	[M]
C134	ECUV1H270JCV	27P 50V	[M]
C136	ECUV1H102KBV	1000P 50V	[M]
C137	ECUV1H332KBV	3300P 50V	[M]
C138	ECUV1E103KBV	0.01 25V	[M]
C139	ECEA1HKA4R7B	4.7 50V	[M]
C141	ECEA1HKA010B	1 50V	[M]
C142	ECEA1HKA010B	1 50V	[M]
C143	ECUV1H682KBV	6800P 50V	[M]
C144	ECUV1H472KBV	4700P 50V	[M]
C147	ECUV1H102KBV	1000P 50V	[M]
C148	ECUV1E103KBV	0.01 25V	[M]
C149	ECUV1C104ZFV	0.1 16V	[M]
C201	ECUV1H681KBV	680P 50V	[M]
C202	ECUV1H101KCV	100P 50V	[M]
C204	ECUV1H221KBV	220P 50V	[M]
C207	ECEA1CKA100B	10 16V	[M]
C225	ECEA1HKA3R3B	3.3 50V	[M]
C226	ECUV1C683KBV	0.068 16V	[M]
C227	ECUV1H681KBV	680P 50V	[M]
C228	ECEA1CKA100B	10 16V	[M]
C229	ECUV1H101KCV	100P 50V	[M]
C230	ECUV1H470JCV	47P 50V	[M]
C231	ECEA1CKA100B	10 16V	[M]
C232	ECUV1H332KBV	3300P 50V	[M]
C233	ECEA1HKA2R2B	2.2 50V	[M]
C234	ECEA1HKA4R7B	4.7 50V	[M]
C235	ECEA1HKA2R2B	2.2 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C236	ECEA1HKA2R2B	2.2 50V	[M]
C237	ECUV1H102KBV	1000P 50V	[M]
C238	ECEA1CKA100B	10 16V	[M]
C239	ECUV1H101KCV	100 50V	[M]
C300	ECUV1E103KBV	0.01 25V	[M]
C301	ECUV1H102KBV	1000P 50V	[M]
C303	ECEA1CKA100B	10 16V	[M]
C304	ECUV1C473KBV	0.047 16V	[M]
C305	ECUV1H472KBV	4700P 50V	[M]
C306	ECEA1HKAR33B	0.33 50V	[M]
C307	ECEA1HKAR33B	0.33 50V	[M]
C308	ECUV1C104KBV	0.1 16V	[M]
C310	ECUV1C473KBV	0.047 16V	[M]
C311	ECEA1HKAR33B	0.33 50V	[M]
C312	ECEA1HKAR33B	0.33 50V	[M]
C313	ECEA1HKAR15B	0.15 50V	[M]
C314	ECEA1HKAR15B	0.15 50V	[M]
C315	ECEA1HKAR15B	0.15 50V	[M]
C316	ECEA1HKAR15B	0.15 50V	[M]
C317	ECEA1HKA2R2B	2.2 50V	[M]
C318	ECUV1E103KBV	0.01 25V	[M]
C320	ECUV1E103KBV	0.01 25V	[M]
C322	ECUV1C223KBV	0.022 16V	[M]
C323	ECUV1C223KBV	0.022 16V	[M]
C324	ECUV1C223KBV	0.022 16V	[M]
C331	ECEA1HKA4R7B	4.7 50V	[M]
C333	ECUV1C223KBV	0.022 16V	[M]
C334	ECUV1E103KBV	0.01 25V	[M]
C335	ECUV1E103KBV	0.01 25V	[M]
C336	ECUV1E103KBV	0.01 25V	[M]
C340	ECUV1E103KBV	0.01 25V	[M]
C341	ECUV1H332KBV	3300P 50V	[M]
C342	ECUV1H332KBV	3300P 50V	[M]
C343	ECUV1C683KBV	0.068 16V	[M]
C344	ECUV1C683KBV	0.068 16V	[M]
C345	ECUV1C683KBV	0.068 16V	[M]
C346	ECUV1C683KBV	0.068 16V	[M]
C347	ECUV1C683KBV	0.068 16V	[M]
C348	ECUV1C683KBV	0.068 16V	[M]
C353	ECUV1C104KBV	0.1 16V	[M]
C354	ECEA1AM221B	220 10V	[M]
C355	ECEA1CKA100B	10 16V	[M]
C356	ECQV1H224JL3	0.22 50V	[M]
C357	ECEA1CKA100B	10 16V	[M]
C358	ECEA2AM100B	10 100V	[M]
C359	ECKR1H103ZF5	0.01 50V	[M]
C360	ECEA1JM101B	100 63V	[M]
C363	ECUV1H101KBV	100P 50V	[M]
C364	ECUV1H101KBV	100P 50V	[M]
C365	ECUV1C474ZFV	0.47 16V	[M]
C374	ECKR1H102ZF5	1000P 50V	[M]
C375	ECUV1H102KBV	1000P 50V	[M]
C378	ECUVNA154KBV	0.15 10V	[M]
C379	ECUVNA154KBV	0.15 10V	[M]
C380	ECUVNA154KBV	0.15 10V	[M]
C381	ECUVNA154KBV	0.15 10V	[M]
C383	ECUV1H103KBV	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C401	ECUV1H681KBV	680P 50V	[M]
C402	ECUV1H101KCV	100P 50V	[M]
C404	ECUV1H221KBV	220P 50V	[M]
C407	ECEA1CKA100B	10 16V	[M]
C425	ECEA1HKA3R3B	3.3 50V	[M]
C426	ECUV1C683KBV	0.068 16V	[M]
C427	ECUV1H681KBV	680P 50V	[M]
C428	ECEA1CKA100B	10 16V	[M]
C429	ECUV1H101KCV	100P 50V	[M]
C430	ECUV1H470JCV	47P 50V	[M]
C431	ECEA1CKA100B	10 16V	[M]
C432	ECUV1H332KBV	3300P 50V	[M]
C433	ECEA1HKA2R2B	2.2 50V	[M]
C434	ECEA1HKA4R7B	4.7 50V	[M]
C435	ECEA1HKA2R2B	2.2 50V	[M]
C436	ECEA1HKA2R2B	2.2 50V	[M]
C437	ECUV1H102KBV	1000P 50V	[M]
C438	ECEA1CKA100B	10 16V	[M]
C439	ECUV1H101KCV	100 50V	[M]
C505	ECEA1HKA010B	1 50V	[M]
C506	ECBT1H102KB5	1000P 50V	[M]
C508	ECBT1H151KB5	150P 50V	[M]
C510	ECBT1H151KB5	150P 50V	[M]
C511	ECBT1H102KB5	1000P 50V	[M]
C514	ECBT1H150J5	15P 50V	[M]
C515	ECKR1H103ZF5	0.01 50V	[M]
C516	ECEA1AKA330B	33 10V	[M]
C517	ECEA2AU100B	10 100V	[M]
C518	ECEA1HKA010B	1 50V	[M]
C519	ECBT1H150J5	15P 50V	[M]
C520	ECEA2AU100B	10 100V	[M]
C521	ECKR1H103ZF5	0.01 50V	[M]
C522	ECKR1H103ZF5	0.01 50V	[M]
C523	ECEA1EKA330B	33 25V	[M]
C524	ECEA1HKAR15B	15 50V	[M]
C525	ECEA1HKA3R3B	3.3 50V	[M]
C526	ECEA1HKAR15B	15 50V	[M]
C527	ECEA1HKA3R3B	3.3 50V	[M]
C533	ECQE2104KF3	0.1 500V	[M]
C534	ECEA1CKA101B	100 16V	[M]
C536	RCEA1E222B-S	2200P 25V	[M]
C537	ECEA0JKA221B	220 6.3V	[M]
C539	ECBT1H102KB5	1000P 50V	[M]
C542	ECBT1H473KB5	0.047 50V	[M]
C544	ECBT1H473KB5	0.047 50V	[M]
C545	ECEA1JM222B	2200 63V	[M]
C546	ECEA1JM222B	2200 63V	[M]
C547	ECKR2H103ZF5	0.01 500V	[M]
C549	ECKR1H103ZF5	0.01 50V	[M]
C550	ECKR1H103ZF5	0.01 50V	[M]
C551	ECEA2AU100B	10 100V	[M]
C552	ECEA1HM101B	100 50V	[M]
C553	ECQV1H474JL3	0.47 50V	[M]
C554	ECEA1HKA100B	10 50V	[M]
C556	ECQV1H184JL3	0.18 50V	[M]
C557	ECBT1H473KB5	0.047 50V	[M]
C558	ECBT1H473KB5	0.047 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C570	RCEA1C102B-S	1000P 16V	[M]
C572	ECKR1H103ZF5	0.01 50V	[M]
C573	ECKR1H103ZF5	0.01 50V	[M]
C574	ECEA1EKA470B	47 25V	[M]
C575	ECKR1H103ZF5	0.01 50V	[M]
C576	ECEA1VKA4R7B	4.7 35V	[M]
C600	ECEA1VKA220B	22 35V	[M]
C606	ECBT1H101KB5	100P 50V	[M]
C607	ECBT1H101KB5	100P 50V	[M]
C608	ECBT1H331KB5	330P 50V	[M]
C609	ECEA0JKA101B	100 6.3V	[M]
C610	ECBT1E104ZF5	0.1 25V	[M]
C611	RCEA0J102B-S	1000P 6.3V	[M]
C612	ECBT1H102KB5	1000P 50V	[M]
C613	ECBT1H101KB5	100P 50V	[M]
C614	ECBT1H101KB5	100P 50V	[M]
C616	ECEA1HKA010B	1 50V	[M]
C617	ECEA1HKA2R2B	2.2 50V	[M]
C618	ECBT1E104ZF5	0.1 25V	[M]
C619	ECBT1H101KB5	100P 50V	[M]
C620	ECBT1H101KB5	100P 50V	[M]
C621	ECBT1E103ZF5	0.01 25V	[M]
C622	ECEA1AKA220B	22 10V	[M]
C623	ECBT1H561KB5	560P 50V	[M]
C624	ECBT1H561KB5	560P 50V	[M]
C625	ECBT1H561KB5	560P 50V	[M]
C626	ECBT1H561KB5	560P 50V	[M]
C627	ECBT1H561KB5	560P 50V	[M]
C628	ECBT1H561KB5	560P 50V	[M]
C629	ECBT1H561KB5	560P 50V	[M]
C630	ECBT1H561KB5	560P 50V	[M]
C631	ECBT1E103ZF5	0.01 25V	[M]
C632	ECBT1H561KB5	560P 50V	[M]
C633	ECBT1H101KB5	100P 50V	[M]
C634	ECEA1VKA220B	22 35V	[M]
C636	ECBT1H561KB5	560P 50V	[M]
C637	ECBT1H561KB5	560P 50V	[M]
C638	ECBT1H561KB5	560P 50V	[M]
C639	ECBT1E103ZF5	0.01 25V	[M]
C640	ECBT1H102KB5	1000P 50V	[M]
C641	ECBT1H102KB5	1000P 50V	[M]
C642	ECBT1H560J5	56P 50V	[M]
C643	ECBT1H560J5	56P 50V	[M]
C644	ECBT1H680J5	68P 50V	[M]
C645	ECBT1H680J5	68P 50V	[M]
C646	ECBT1H180JC5	18P 50V	[M]
C647	ECBT1H150JC5	15P 50V	[M]
C648	ECBT1H102KB5	1000P 50V	[M]
C660	ECEA1HKA3R3B	3.3 50V	[M]
C661	ECBT1E104ZF5	0.1 25V	[M]
C696	ECBT1H101KB5	100 50V	[M]
C697	ECBT1H101KB5	100 50V	[M]
C698	ECBT1H101KB5	100 50V	[M]
C699	ECBT1E104ZF5	0.1 25V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECUV1C104KBV	0.1 16V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C704	ECUV1C104KBV	0.1 16V	[M]
C706	ECUV1H272KBV	2700P 50V	[M]
C707	ECUV1E273KBV	0.027 25V	[M]
C710	ECUV1H121KCV	120P 50V	[M]
C711	ECUV1C104ZFV	0.1 16V	[M]
C712	ECUV1C104ZFV	0.1 16V	[M]
C713	ECUV1C104KBV	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECUV1H272KBV	2700P 50V	[M]
C716	ECUV1H821KBN	820P 50V	[M]
C717	ECUV1C104ZFV	0.1 16V	[M]
C718	ECUV1A224KBV	0.22 10V	[M]
C721	ECUV1H100DCV	10P 50V	[M]
C722	ECUV1H100DCV	10P 50V	[M]
C723	ECEA1AKA221I	220 10V	[M]
C724	ECUZ1E104MBN	0.1 25V	[M]
C725	ECUV1H102KBV	1000P 50V	[M]
C726	ECUV1H102KBV	1000P 50V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C730	ECUV1C104ZFV	0.1 16V	[M]
C731	ECEA0JKA221I	220 6.3V	[M]
C732	ECEA0JKA221I	220 6.3V	[M]
C733	ECUV1C104KBV	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUVNE104ZFN	0.1 25V	[M]
C736	ECUV1C104ZFV	0.1 16V	[M]
C737	ECUV1C104ZFV	0.1 16V	[M]
C738	ECUV1H103KBN	0.01 50V	[M]
C739	ECUV1H152KBV	1500P 50V	[M]
C742	ECUV1E273KBV	0.027 25V	[M]
C743	ECUV1C104ZFV	0.1 16V	[M]
C744	ECUV1H562KBV	5600P 50V	[M]
C745	ECUV1H102KBV	1000P 50V	[M]
C747	ECUV1H181KCV	180P 50V	[M]
C749	ECUV1H222KBV	2200P 50V	[M]
C750	ECUZ1E104MBN	0.1 25V	[M]
C751	ECUV1C104KBV	0.1 16V	[M]
C752	ECUV1H102KBV	1000P 50V	[M]
C753	ECUV1H471KBV	470P 50V	[M]
C754	ECUV1H471KBV	470P 50V	[M]
C900	ECBT1H101KB5	100P 50V	[M]
C919	ECBT1H101KB5	100P 50V	[M]
C920	ECBT1E223ZF5	0.022 25V	[M]
C921	ECBT1E223ZF5	0.022 25V	[M]
C940	ECBT1H102KB5	1000P 50V	[M]
C941	ECBT1E103ZF5	0.01 25V	[M]
C990	ECEA0JKA470B	47 6.3V	[M]
C991	ECBT1H102KB5	1000P 50V	[M]
C992	ECBT1E103ZF5	0.01 25V	[M]
C993	ECBT1H470J5	47P 50V	[M]
C994	ECBT1H470J5	47P 50V	[M]
C995	ECEA1HKA100B	10 50V	[M]
C996	ECBT1H331KB5	330P 50V	[M]
C997	ECEA1HKA100B	10 50V	[M]
C998	ECBT1H561KB5	560P 50V	[M]
C1001	ECUV1H103ZFV	0.01 50V	[M]

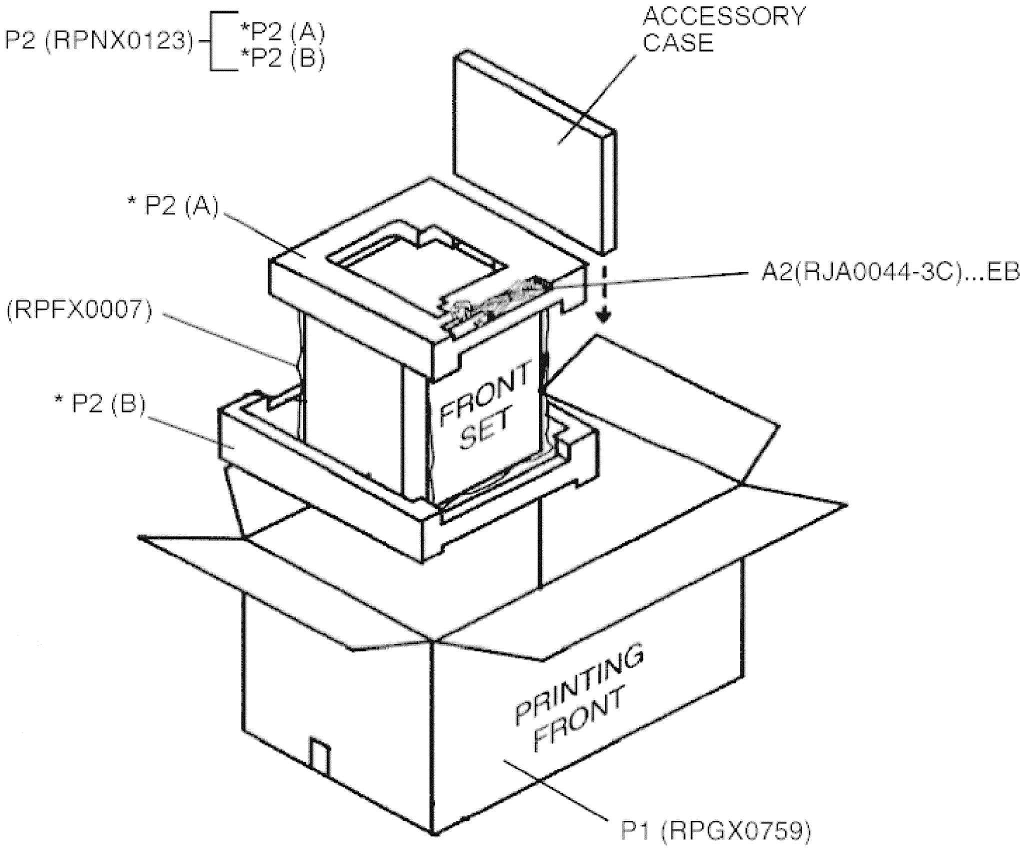
Ref. No.	Part No.	Part Name & Description	Remarks
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1003	ECQP1152JZT	1500P 100V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	ECQP2A472JZT	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1AKA470B	47 10V	[M]
C1010	ECEA1EM101B	100 25V	[M]
C1011	ECQV1H473JL3	0.047 50V	[M]
C1012	ECUV1H102KBV	1000P 50V	[M]
C1013	ECUV1H102KBV	1000P 50V	[M]
C1014	ECUV1H102KBV	1000P 50V	[M]
C1015	ECUV1H102KBV	1000P 50V	[M]
C1016	ECUV1H222KBV	2200P 50V	[M]
C1017	ECUV1H222KBV	2200P 50V	[M]
C1018	ECUV1H103KBV	0.01 50V	[M]
C1019	ECUV1H102KBV	1000P 50V	[M]
C1020	ECUV1H471KBV	470P 50V	[M]
C1021	ECUV1H471KBV	470P 50V	[M]
C1022	ECUV1H102KBV	1000P 50V	[M]
C1023	ECUV1H102KBV	1000P 50V	[M]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	ECUV1H102KBV	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECEA1AKA101B	100 10V	[M]
C1032	ECFR1C183KR	0.018 16V	[M]
C1033	ECFR1C183KR	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECUV1C333KBV	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECUV1H221KBV	220P 50V	[M]
C1039	ECUV1H221KBV	220P 50V	[M]
C1040	ECEA1CKA100B	10 16V	[M]
C1041	ECEA1CKA100B	10 16V	[M]
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECEA1AKA221Q	220 10V	[M]
C1047	ECEA1HKA010B	1 50V	[M]
C1048	ECEA1HKA010B	1 50V	[M]
C1049	ECUV1H102KBV	1000P 50V	[M]
C1050	ECUV1H102KBV	1000P 50V	[M]
C1051	ECEA1HKA010B	1 50V	[M]
C1052	ECEA1HKA010B	1 50V	[M]
C1053	ECEA1CM221B	220 16V	[M]
C1054	ECEA1HKA3R3B	3.3 50V	[M]
C1055	ECEA1HKA0R1B	0.1 50V	[M]
C1056	ECUV1H103KBV	0.01 50V	[M]
C1057	ECEA1HKA3R3B	3.3 50V	[M]
C1058	ECUV1H470JCV	47P 50V	[M]
C1059	ECUV1H101KCV	100P 50V	[M]
C1060	ECUV1H472KBV	4700P 50V	[M]
C1061	ECUV1H101KCV	100P 50V	[M]
C1062	ECUV1C104ZFV	0.1 16V	[M]
C1063	ECUV1C104ZFV	0.1 16V	[M]
C1064	ECEA1HKA3R3B	3.3 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1065	ECUV1H103ZFV	0.01 50V	[M]
		CHIP JUMPER	
RJ701	ERJ6GEY0R00V	0 1/10W	[M]
RJ702	ERJ6GEY0R00V	0 1/10W	[M]
RJ704	ERJ6GEY0R00V	0 1/10W	[M]
RJ710	ERJ6GEY0R00V	0 1/10W	[M]
RJ712	ERJ6GEY0R00V	0 1/10W	[M]
RJ713	ERJ6GEY0R00V	0 1/10W	[M]
RJ714	ERJ6GEY0R00V	0 1/10W	[M]
RJ721	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ725	ERJ3GEY0R00V	0 1/16W	[M]
RJ726	ERJ3GEY0R00V	0 1/16W	[M]
RJ727	ERJ3GEY0R00V	0 1/16W	[M]
RJ728	ERJ3GEY0R00V	0 1/16W	[M]
RJ729	ERJ3GEY0R00V	0 1/16W	[M]
RJ730	ERJ3GEY0R00V	0 1/16W	[M]
RJ731	ERJ3GEY0R00V	0 1/16W	[M]
RJ732	ERJ3GEY0R00V	0 1/16W	[M]
RJ733	ERJ3GEY0R00V	0 1/16W	[M]
RJ734	ERJ3GEY0R00V	0 1/16W	[M]
RJ735	ERJ3GEY0R00V	0 1/16W	[M]
RJ736	ERJ3GEY0R00V	0 1/16W	[M]
RJ737	ERJ3GEY0R00V	0 1/16W	[M]
RJ738	ERJ3GEY0R00V	0 1/16W	[M]
RJ739	ERJ3GEY0R00V	0 1/16W	[M]
RJ740	ERJ3GEY0R00V	0 1/16W	[M]
RJ741	ERJ3GEY0R00V	0 1/16W	[M]
RJ742	ERJ3GEY0R00V	0 1/16W	[M]
		TEST JUMPER	
TJ701	EYF8CU	TEST JUMEPR	[M]

20.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX0759	PACKING CASE	[MAVD]
P2	RPNX0123	POLYFOAM	[MAVD]
P3	RPFX0007	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	N2QAGB000006	REMOTE CONTROLLER	[MAVD]
A1-1	R0280-720010	R/C BATTERY COVER	[MAVD]
A2	RJA0043-1C	AC CORD	EG E ⚠
A2	RJA0044-3C	AC CORD	EB ⚠
A3	RQT5662-E	O/I BOOK (Sp)	E
A3	RQT5663-R	O/I BOOK (Cz/Po)	E
A3	RQT5664-D	O/I BOOK (Ge/It/Fr)	EG
A3	RQT5665-H	O/I BOOK (Du/Da/Sw)	EG
A3	RQT5666-B1	O/I BOOK (En)	EB E
A4	RSA0007	FM ANTENNA	[M]
A5	RSA0029	AM LOOP ANTENNA	[M]
A6	SJP9009	ANT ADAPTER	[M]EB

20.6. Packaging

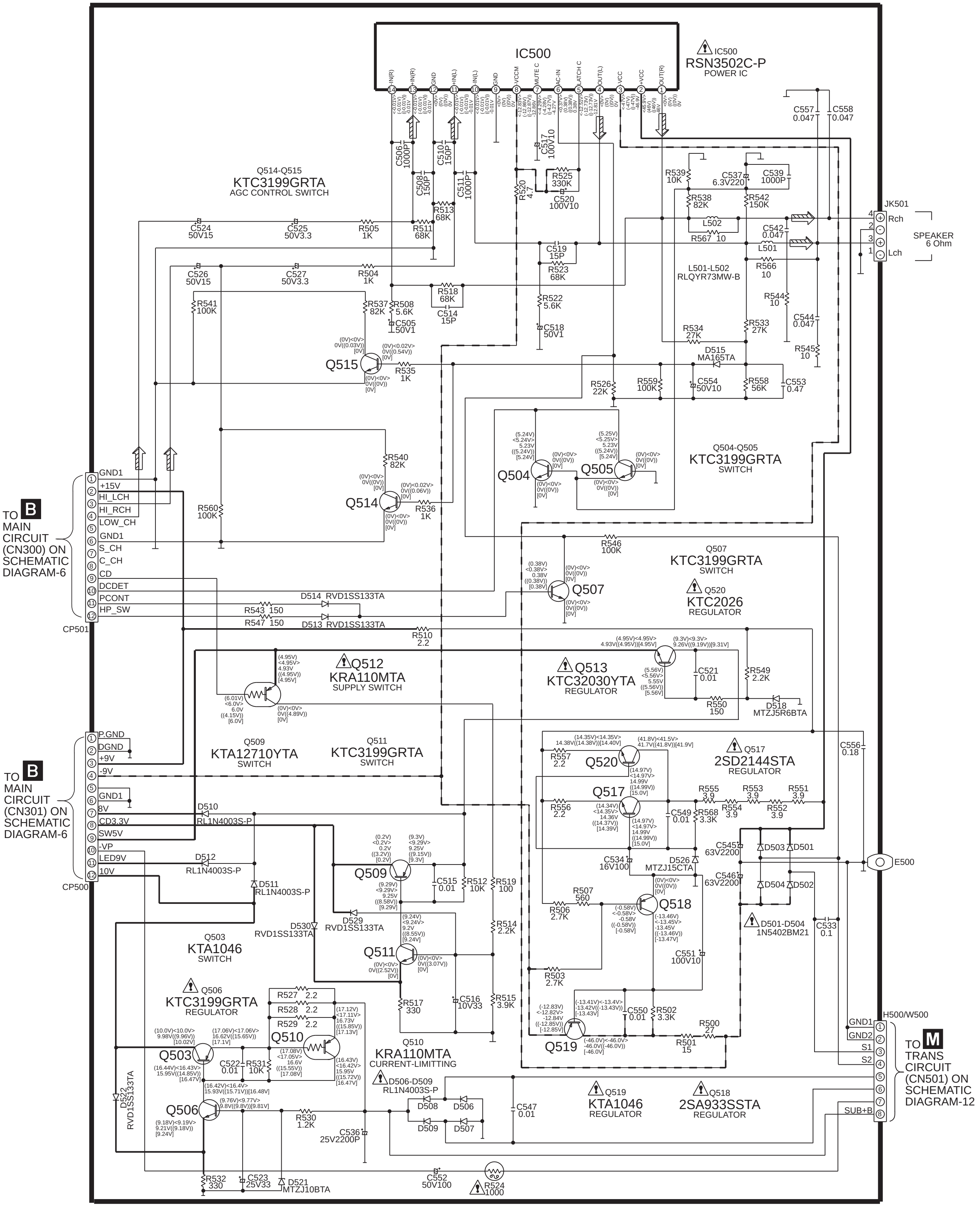

P2 (RPNX0123)
*P2 (A)
*P2 (B)
ACCESSORY CASE
* P2 (A)
A2(RJA0044-3C)...EB
P3 (RPFX0007)
* P2 (B)
FRONT SET
PRINTING FRONT
P1 (RPGX0759)

Printed in Singapore / P010500001 D/H/K/J/N/L/PRT

SCHEMATIC DIAGRAM - 11

—— : +B SIGNAL LINE   - - : -B SIGNAL LINE   ⇨ : MAIN SIGNAL LINE

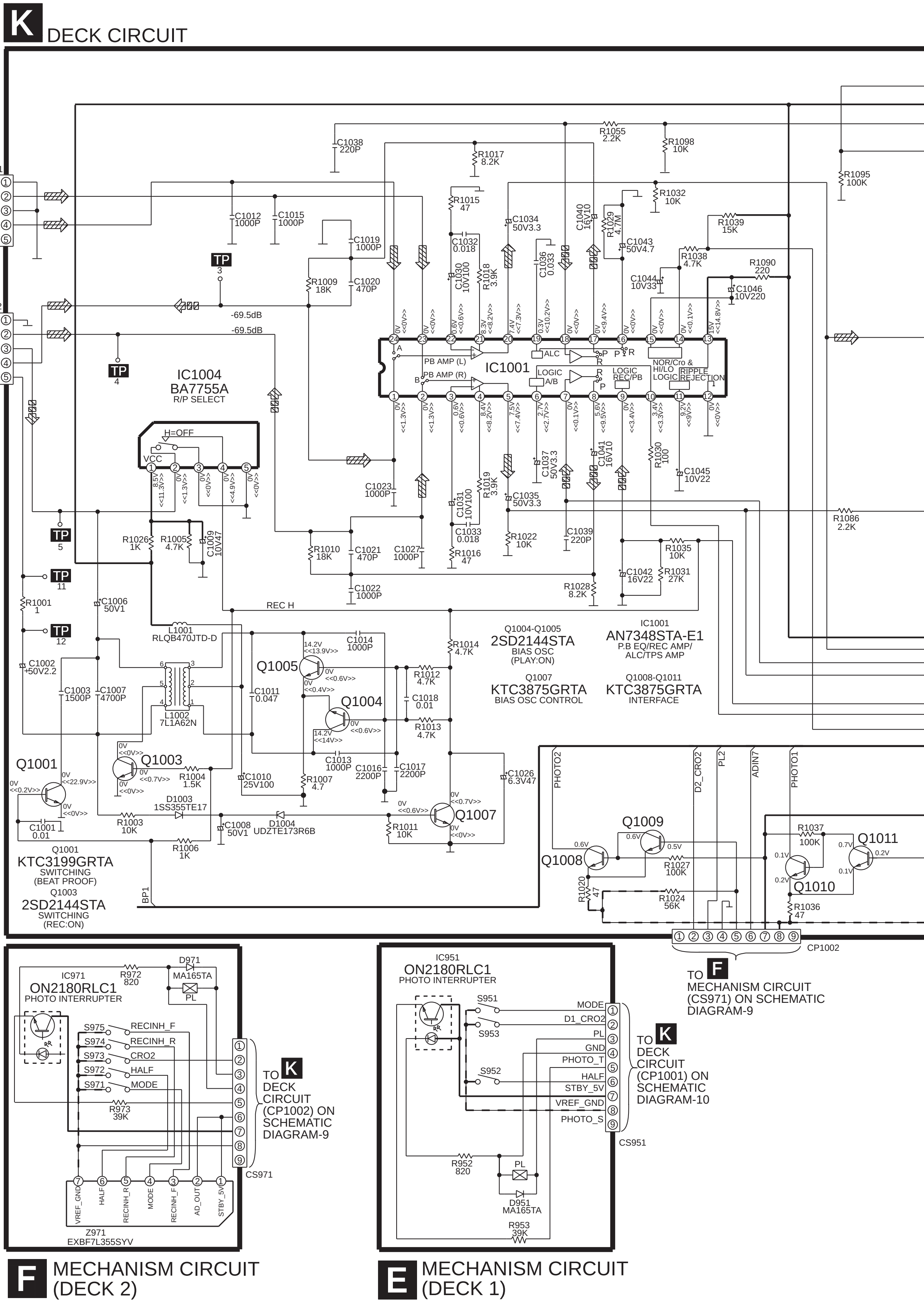
L POWER CIRCUIT



IC500
⚠IC500
RSN3502C-P
POWER IC
14 IN(R)
13 +IN(R)
12 GND
11 +IN(L)
10 IN(L)
9 GND
8 VCCM
7 MUTE C
6 AC-IN
5 LATCH C
4 OUT(L)
3 VCC
2 +VCC
1 OUT(R)
Q514-Q515
KTC3199GRTA
AGC CONTROL SWITCH
C524 50V15
C525 50V3.3
R505 1K
R511 68K
R513 68K
C526 50V15
C527 50V3.3
R504 1K
C506 1000P
C508 150P
C510 150P
C511 1000P
R520 4.7
C517 100V10
R525 330K
C520 100V10
C519 15P
R523 68K
R518 68K
C514 15P
R522 5.6K
C518 50V1
R541 100K
R537 82K
R508 5.6K
C505 50V1
Q515
R535 1K
R540 82K
Q514
R536 1K
R560 100K
C557 0.047
C558 0.047
R539 10K
C537 6.3V220
C539 1000P
R538 82K
R542 150K
L502
R567 10
C542 0.047
L501
R566 10
L501-L502
RLQYR73MW-B
R544 10
C544 0.047
R545 10
R534 27K
R533 27K
D515 MA165TA
R526 22K
R559 100K
C554 50V10
R558 56K
C553 0.47
JK501
Rch
Lch
SPEAKER 6 Ohm
Q504
Q505
Q504-Q505
KTC3199GRTA
SWITCH
R546 100K
Q507
KTC3199GRTA
SWITCH
⚠Q520
KTC2026
REGULATOR
D514 RVD1SS133TA
R543 150
R547 150
D513 RVD1SS133TA
R510 2.2
⚠Q512
KRA110MTA
SUPPLY SWITCH
⚠Q513
KTC32030YTA
REGULATOR
C521 0.01
R549 2.2K
R550 150
D518 MTZJ5R6BTA
Q509
KTA12710YTA
SWITCH
Q511
KTC3199GRTA
SWITCH
TO B MAIN CIRCUIT (CN300) ON SCHEMATIC DIAGRAM-6
CP501
1 GND1
2 +15V
3 HI_LCH
4 HI_RCH
5 LOW_CH
6 GND1
7 S_CH
8 C_CH
9 CD
10 DCDET
11 PCONT
12 HP_SW
TO B MAIN CIRCUIT (CN301) ON SCHEMATIC DIAGRAM-6
CP500
1 P.GND
2 DGND
3 +9V
4 -9V
5
6 GND1
7 8V
8 CD3.3V
9 SW5V
10 -VP
11 LED9V
12 10V
D510 RL1N4003S-P
D512 RL1N4003S-P
D511 RL1N4003S-P
R557 2.2
Q520
⚠Q517
2SD2144STA
REGULATOR
Q517
R556 2.2
C549 0.01
R568 3.3K
R555 3.9
R553 3.9
R551 3.9
R554 3.9
R552 3.9
C556 0.18
C545 63V2200
D503
D501
E500
C534 16V100
D526 MTZJ15CTA
C546 63V2200
D504
D502
R507 560
R506 2.7K
Q518
⚠D501-D504
1N5402BM21
C533 0.1
C551 100V10
R503 2.7K
C550 0.01
R502 3.3K
R500 27
R501 15
Q519
C515 0.01
R512 10K
R519 100
D529 RVD1SS133TA
D530 RVD1SS133TA
R514 2.2K
Q503
KTA1046
SWITCH
R517 330
C516 10V33
R515 3.9K
⚠Q506
KTC3199GRTA
REGULATOR
R527 2.2
R528 2.2
R529 2.2
Q510
Q503
C522 0.01
R531 10K
Q510
KRA110MTA
CURRENT-LIMITTING
⚠D506-D509
RL1N4003S-P
D508
D506
D509
D507
C547 0.01
⚠Q519
KTA1046
REGULATOR
⚠Q518
2SA933SSTA
REGULATOR
D522 RVD1SS133TA
Q506
R530 1.2K
C536 25V2200P
R532 330
C523 25V33
D521 MTZJ10BTA
C552 50V100
⚠R524 1000
H500/W500
1 GND1
2 GND2
3 S1
4 S2
5
6
7
8 SUB+B
TO M TRANS CIRCUIT (CN501) ON SCHEMATIC DIAGRAM-12

SCHEMATIC DIAGRAM - 9

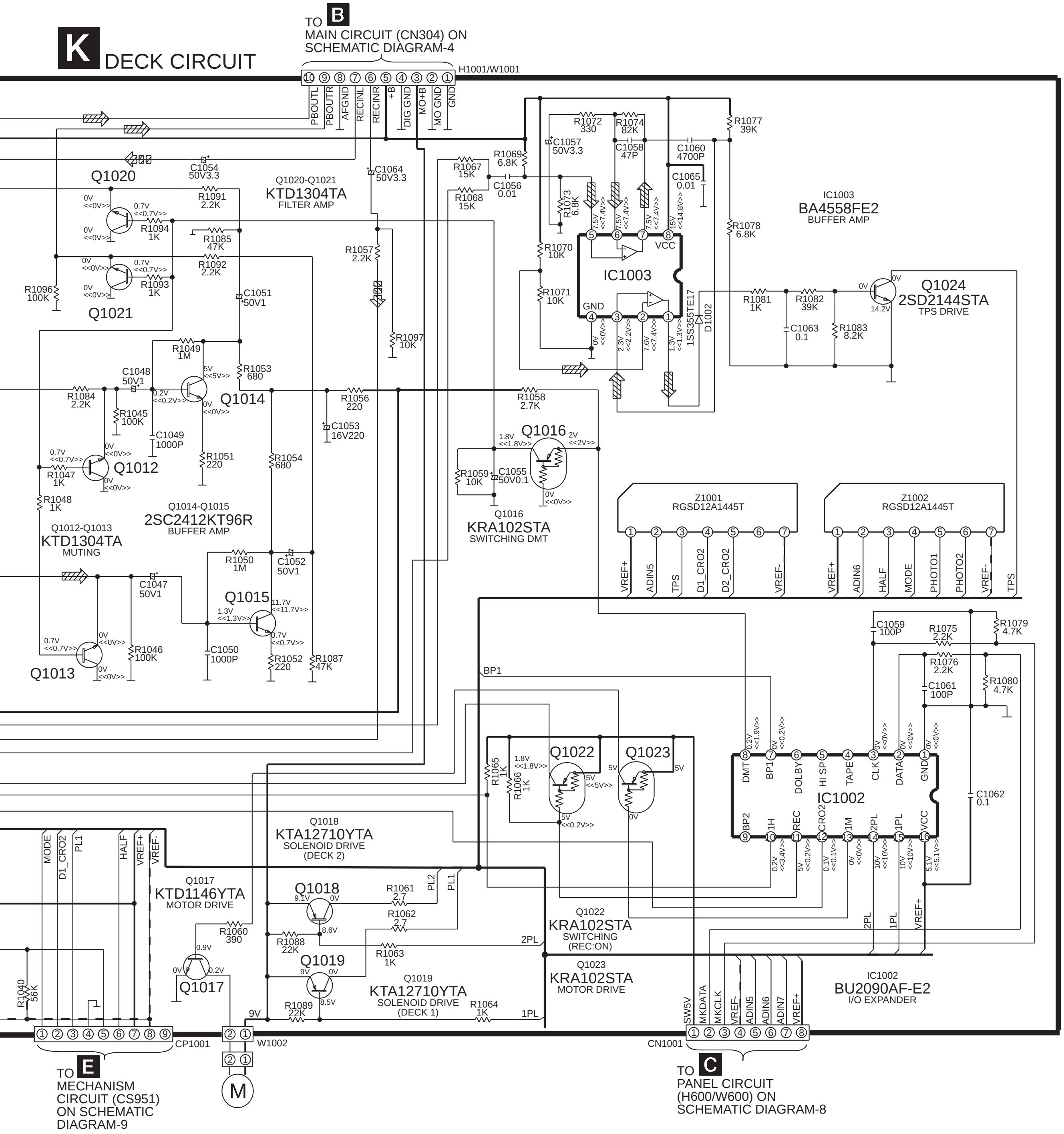
: +B SIGNAL LINE
: -B SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE



K DECK CIRCUIT
CS1001
P.B HEAD
L
R
CS1002
R/P HEAD
E HEAD
TP 3
TP 4
TP 5
TP 11
TP 12
-69.5dB
-69.5dB
IC1004
BA7755A
R/P SELECT
H=OFF
VCC
C1038 220P
R1017 8.2K
R1055 2.2K
R1098 10K
R1095 100K
C1012 1000P
C1015 1000P
C1019 1000P
R1009 18K
C1020 470P
R1015 47
C1032 0.018
C1030 10V100
R1018 3.9K
C1034 50V3.3
C1036 0.033
C1040 16V10
R1029 4.7M
C1043 50V4.7
R1032 10K
R1039 15K
R1038 4.7K
C1044 10V33
R1090 220
C1046 10V220
IC1001
PB AMP (L)
PB AMP (R)
ALC
LOGIC A/B
LOGIC REC/PB
NOR/Cro & HI/LO LOGIC
RIPPLE REJECTION
C1023 1000P
R1031 10V100
C1033 0.018
R1016 47
R1019 3.9K
C1035 50V3.3
R1022 10K
C1037 50V3.3
C1039 220P
C1041 16V10
R1030 100
C1045 10V22
R1086 2.2K
R1026 1K
R1005 4.7K
C1009 10V47
R1010 18K
C1021 470P
C1027 1000P
C1022 1000P
R1035 10K
C1042 16V22
R1031 27K
R1028 8.2K
R1001 1
C1006 50V1
C1002 50V2.2
REC H
L1001 RLQB470JTD-D
L1002 7L1A62N
C1003 1500P
C1007 4700P
Q1005
Q1004
C1014 1000P
C1011 0.047
R1012 4.7K
C1018 0.01
R1013 4.7K
R1014 4.7K
Q1004-Q1005 2SD2144STA BIAS OSC (PLAY:ON)
Q1007 KTC3875GRTA BIAS OSC CONTROL
IC1001 AN7348STA-E1 P.B EQ/REC AMP/ ALC/TPS AMP
Q1008-Q1011 KTC3875GRTA INTERFACE
Q1001
Q1003
R1004 1.5K
C1013 1000P
C1016 2200P
C1017 2200P
C1010 25V100
R1007 4.7
D1003 1SS355TE17
R1003 10K
C1001 0.01
C1008 50V1
D1004 UDZTE173R6B
R1011 10K
Q1007
C1026 6.3V47
R1006 1K
Q1001 KTC3199GRTA SWITCHING (BEAT PROOF)
Q1003 2SD2144STA SWITCHING (REC:ON)
BP1
PHOTO2
D2_CRO2
PL2
ADIN7
PHOTO1
Q1009
Q1008
Q1011
Q1010
R1037 100K
R1027 100K
R1020 47
R1024 56K
R1036 47
CP1002
TO F MECHANISM CIRCUIT (CS971) ON SCHEMATIC DIAGRAM-9
IC971 ON2180RLC1 PHOTO INTERRUPTER
R972 820
D971 MA165TA
PL
S975 RECINH_F
S974 RECINH_R
S973 CRO2
S972 HALF
S971 MODE
R973 39K
CS971
Z971 EXBF7L355SYV
VREF_GND
HALF
RECINH_R
MODE
RECINH_F
AD_OUT
STBY_5V
TO K DECK CIRCUIT (CP1002) ON SCHEMATIC DIAGRAM-9
F MECHANISM CIRCUIT (DECK 2)
IC951 ON2180RLC1 PHOTO INTERRUPTER
S951
S953
S952
MODE
D1_CRO2
PL
GND
PHOTO_T
HALF
STBY_5V
VREF_GND
PHOTO_S
CS951
TO K DECK CIRCUIT (CP1001) ON SCHEMATIC DIAGRAM-10
R952 820
PL
D951 MA165TA
R953 39K
E MECHANISM CIRCUIT (DECK 1)

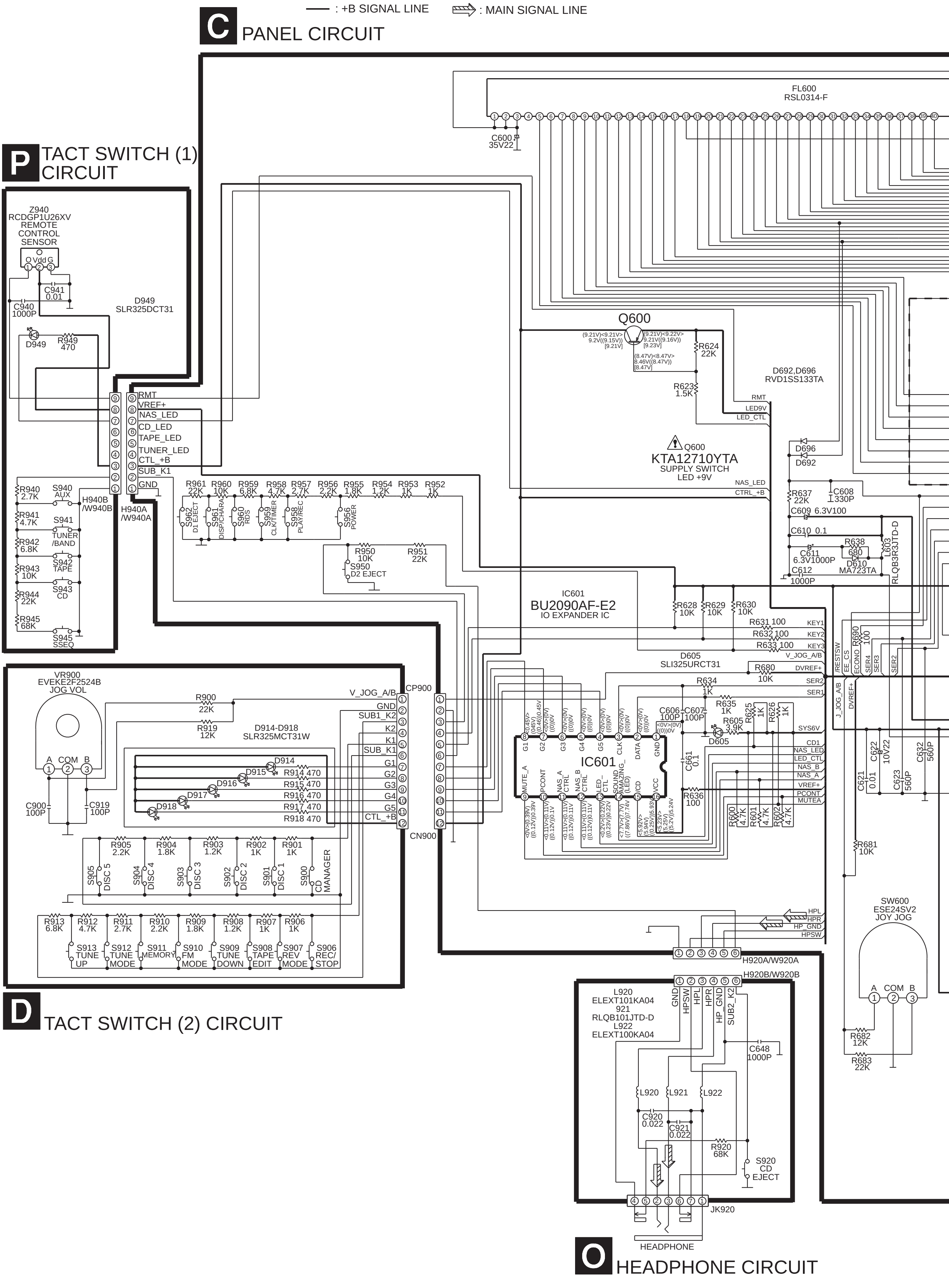
SCHEMATIC DIAGRAM - 10

—— : +B SIGNAL LINE — — : -B SIGNAL LINE ▨ : PLAYBACK SIGNAL LINE ▨ : RECORD SIGNAL LINE



K DECK CIRCUIT
TO B MAIN CIRCUIT (CN304) ON SCHEMATIC DIAGRAM-4
H1001/W1001
PBOUTL
PBOUTR
AFGND
RECINL
RECINR
+B
DIG GND
MO+B
MO GND
GND
Q1020
Q1021
Q1020-Q1021 KTD1304TA FILTER AMP
C1054 50V3.3
R1091 2.2K
R1094 1K
R1085 47K
R1092 2.2K
R1093 1K
R1096 100K
C1051 50V1
C1064 50V3.3
R1057 2.2K
R1097 10K
R1067 15K
R1068 15K
R1069 6.8K
C1056 0.01
R1072 330
R1074 82K
C1057 50V3.3
C1058 47P
C1060 4700P
C1065 0.01
R1073 6.8K
R1077 39K
R1078 6.8K
R1070 10K
R1071 10K
IC1003
IC1003 BA4558FE2 BUFFER AMP
VCC
GND
1SS355TE17
D1002
R1081 1K
R1082 39K
C1063 0.1
R1083 8.2K
Q1024 2SD2144STA TPS DRIVE
14.2V
R1049 1M
C1048 50V1
R1084 2.2K
R1045 100K
C1049 1000P
R1053 680
Q1014
R1056 220
C1053 16V220
R1058 2.7K
R1051 220
R1054 680
Q1012
R1047 1K
R1048 1K
Q1014-Q1015 2SC2412KT96R BUFFER AMP
Q1012-Q1013 KTD1304TA MUTING
Q1016 KRA102STA SWITCHING DMT
R1059 10K
C1055 50V0.1
R1050 1M
C1052 50V1
C1047 50V1
Q1015
R1046 100K
C1050 1000P
R1052 220
R1087 47K
Q1013
Z1001 RGSD12A1445T
Z1002 RGSD12A1445T
VREF+
ADIN5
TPS
D1_CRO2
D2_CRO2
VREF-
ADIN6
HALF
MODE
PHOTO1
PHOTO2
C1059 100P
R1075 2.2K
R1079 4.7K
R1076 2.2K
C1061 100P
R1080 4.7K
C1062 0.1
BP1
Q1022
Q1023
R1065 1K
R1066 1K
IC1002
DMT
DOLBY
HI SP
TAPE
CLK
DATA
BP2
1H
REC
CRO2
1M
2PL
1PL
Q1018 KTA12710YTA SOLENOID DRIVE (DECK 2)
Q1017 KTD1146YTA MOTOR DRIVE
Q1018
R1061 2.7
R1062 2.7
PL2
PL1
R1060 390
R1088 22K
Q1019
R1063 1K
Q1019 KTA12710YTA SOLENOID DRIVE (DECK 1)
R1089 22K
R1064 1K
Q1017
R1040 56K
Q1022 KRA102STA SWITCHING (REC:ON)
Q1023 KRA102STA MOTOR DRIVE
IC1002 BU2090AF-E2 I/O EXPANDER
SW5V
MKDATA
MKCLK
ADIN7
9V
CP1001
W1002
CN1001
M
TO E MECHANISM CIRCUIT (CS951) ON SCHEMATIC DIAGRAM-9
TO C PANEL CIRCUIT (H600/W600) ON SCHEMATIC DIAGRAM-8

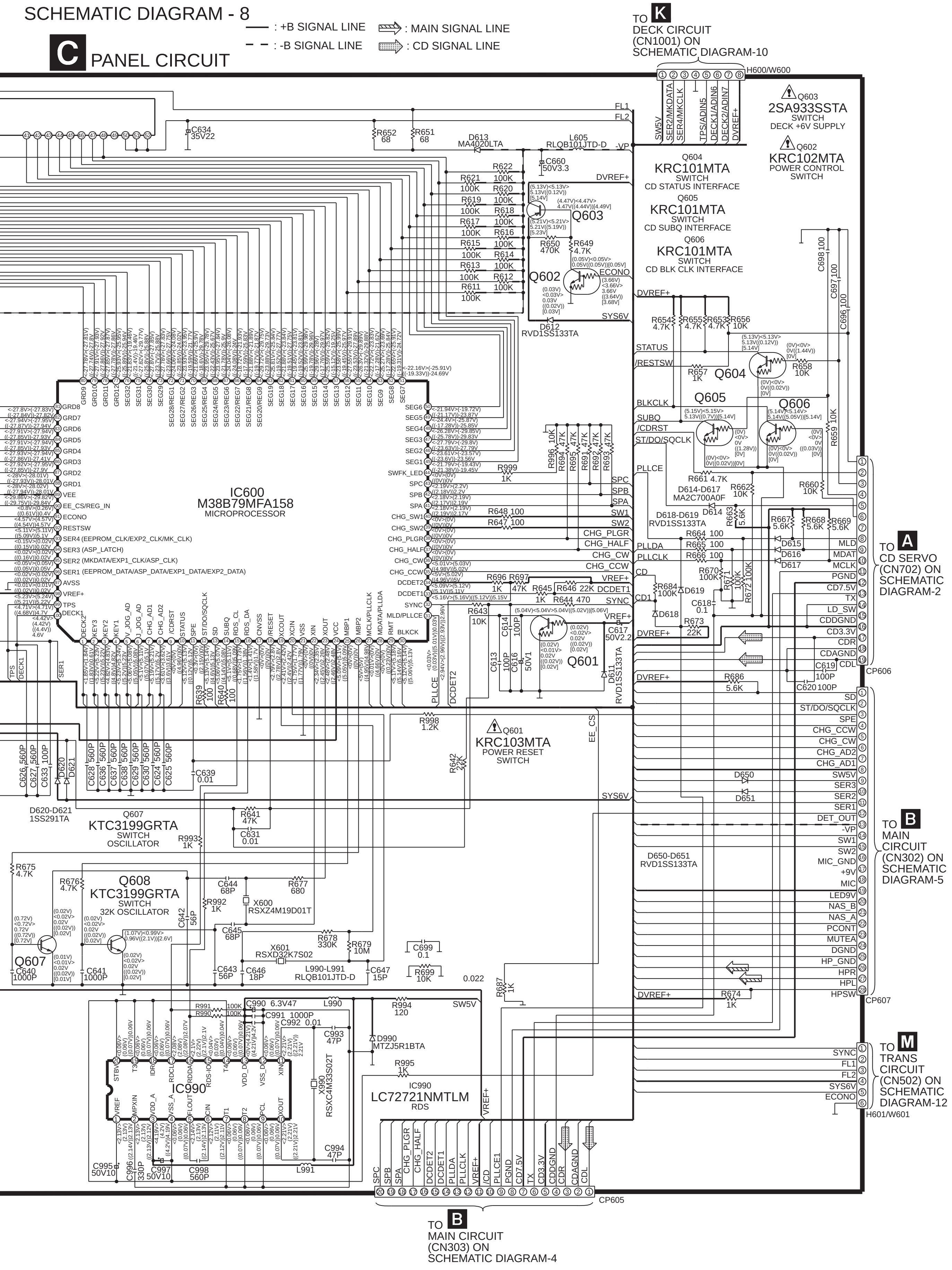
SCHEMATIC DIAGRAM - 7


: +B SIGNAL LINE
: MAIN SIGNAL LINE
C PANEL CIRCUIT
P TACT SWITCH (1) CIRCUIT
D TACT SWITCH (2) CIRCUIT
O HEADPHONE CIRCUIT
FL600
RSL0314-F
C600
35V22
Z940
RCDGP1U26XV
REMOTE
CONTROL
SENSOR
O Vdd G
C941
0.01
C940
1000P
D949
SLR325DCT31
D949
R949
470
RMT
VREF+
NAS_LED
CD_LED
TAPE_LED
TUNER_LED
CTL_+B
SUB_K1
GND
H940B
/W940B
H940A
/W940A
R940 2.7K
S940 AUX
R941 4.7K
S941 TUNER /BAND
R942 6.8K
S942 TAPE
R943 10K
S943 CD
R944 22K
R945 68K
S945 SSEQ
R961 22K
R960 10K
R959 6.8K
R958 4.7K
R957 2.7K
R956 2.2K
R955 1.8K
R954 1.2K
R953 1K
R952 1K
S962 D1 EJECT
S961 DISP/CHARA
S960 RDS
S959 CLK/TIMER
S958 PLAY/REC
S956 POWER
R950 10K
R951 22K
S950 D2 EJECT
Q600
R624 22K
R623 1.5K
Q600
KTA12710YTA
SUPPLY SWITCH
LED +9V
D692,D696
RVD1SS133TA
RMT
LED9V
LED_CTL
D696
D692
NAS_LED
CTRL_+B
R637 22K
C608 330P
C609 6.3V100
C610 0.1
C611 6.3V1000P
R638 680
D610 MA723TA
L603 RLQB3R3JTD-D
C612 1000P
IC601
BU2090AF-E2
IO EXPANDER IC
R628 10K
R629 10K
R630 10K
R631 100
R632 100
R633 100
KEY1
KEY2
KEY3
V_JOG_A/B
D605
SLI325URCT31
R680 10K
DVREF+
R634 1K
SER2
SER1
R635 1K
R625 1K
R626 1K
C606 100P
C607 100P
R605 3.9K
D605
SYS6V
CD1
NAS_LED
LED_CTL
NAS_B
NAS_A
VREF+
PCONT
MUTEA
IC601
G1 G2 G3 G4 G5 CLK DATA GND
MUTE_A PCONT NAS_A CTRL NAS_B CTRL LED_ CTL_ SOUND AMAZING_(LED) CD VCC
C661 0.1
R636 100
R600 4.7K
R601 4.7K
R602 4.7K
R603 4.7K
/RESTSW
EE_CS
ECONO
R690 100
SER4
SER3
SER2
J_JOG_A/B
DVREF+
C621 0.01
C622 10V22
C623 560P
C632 560P
R681 10K
SW600
ESE24SV2
JOY JOG
A COM B
R682 12K
R683 22K
VR900
EVEKE2F2524B
JOG VOL
A COM B
C900 100P
C919 100P
R900 22K
R919 12K
D914-D918
SLR325MCT31W
D914
D915
D916
D917
D918
R914 470
R915 470
R916 470
R917 470
R918 470
V_JOG_A/B
GND
SUB1_K2
K2
K1
SUB_K1
G1
G2
G3
G4
G5
CTL_+B
CP900
CN900
R905 2.2K
R904 1.8K
R903 1.2K
R902 1K
R901 1K
S905 DISC 5
S904 DISC 4
S903 DISC 3
S902 DISC 2
S901 DISC 1
S900 CD MANAGER
R913 6.8K
R912 4.7K
R911 2.7K
R910 2.2K
R909 1.8K
R908 1.2K
R907 1K
R906 1K
S913 TUNE UP
S912 TUNE MODE
S911 MEMORY
S910 FM MODE
S909 TUNE DOWN
S908 TAPE EDIT
S907 REV MODE
S906 REC/ STOP
HPL
HPR
HP_GND
HPSW
H920A/W920A
H920B/W920B
GND HPSW HPL HPR HP_GND SUB2_K2
L920
ELEXT101KA04
921
RLQB101JTD-D
L922
ELEXT100KA04
C648 1000P
L920
L921
L922
C920 0.022
C921 0.022
R920 68K
S920 CD EJECT
JK920
HEADPHONE

SCHEMATIC DIAGRAM - 8

C PANEL CIRCUIT

—— : +B SIGNAL LINE
- - : -B SIGNAL LINE
⇨ : MAIN SIGNAL LINE
⇨ : CD SIGNAL LINE


TO K
DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-10
H600/W600
SW5V
SER2/MKDATA
SER4/MKCLK
TPS/ADIN5
DECK1/ADIN6
DECK2/ADIN7
DVREF+
Q603 2SA933SSTA SWITCH DECK +6V SUPPLY
Q602 KRC102MTA POWER CONTROL SWITCH
Q604 KRC101MTA SWITCH CD STATUS INTERFACE
Q605 KRC101MTA SWITCH CD SUBQ INTERFACE
Q606 KRC101MTA SWITCH CD BLK CLK INTERFACE
FL1
FL2
C634 35V22
R652 68
R651 68
D613 MA4020LTA
L605 RLQB101JTD-D
-VP
C660 50V3.3
DVREF+
R622 100K
R621 100K
R620 100K
R619 100K
R618 100K
R617 100K
R616 100K
R615 100K
R614 100K
R613 100K
R612 100K
R611 100K
R650 470K
R649 4.7K
ECONO
SYS6V
D612 RVD1SS133TA
R654 4.7K
R655 4.7K
R653 4.7K
R656 10K
STATUS
/RESTSW
R657 1K
R658 10K
BLKCLK
SUBQ
/CDRST
ST/DO/SQCLK
PLLCE
R661 4.7K
D614-D617 MA2C700A0F
R662 10K
R660 10K
R659 10K
C698 100
C697 100
C696 100
D618-D619 RVD1SS133TA
R663 5.6K
R667 5.6K
R668 5.6K
R669 5.6K
R664 100
R665 100
R666 100
PLLDA
PLLCLK
CD
CD1
R670 100K
R671 100K
R672 100K
R684 100K
D619
D618
C618 0.1
R673 22K
IC600 M38B79MFA158 MICROPROCESSOR
GRD8 GRD7 GRD6 GRD5 GRD4 GRD3 GRD2 GRD1
VEE
EE_CS/REG_IN
ECONO
RESTSW
SER4 (EEPROM_CLK/EXP2_CLK/MK_CLK)
SER3 (ASP_LATCH)
SD
SER2 (MKDATA/EXP1_CLK/ASP_CLK)
SER1 (EEPROM_DATA/ASP_DATA/EXP1_DATA/EXP2_DATA)
AVSS
VREF+
TPS
DECK1
SEG6 SEG5 SEG4 SEG3 SEG2 SEG1
SWFK_LED
SPC SPB SPA
CHG_SW1 CHG_SW2 CHG_PLGR CHG_HALF CHG_CW CHG_CCW
DCDET2 DCDET1
SYNC
MLD/PLLCE
R999 1K
R648 100
R647 100
SW1 SW2
R996 10K
R694 47K
R695 47K
R691 47K
R692 47K
R693 47K
R696 1K
R697 47K
R645 1K
R646 22K
R644 470
R643 10K
C614 100P
C613 100P
C616 50V1
C617 50V2.2
D611 RVD1SS133TA
Q601
R686 5.6K
C619 100P
C620 100P
TO A
CD SERVO (CN702) ON SCHEMATIC DIAGRAM-2
MLD MDAT MCLK PGND CD7.5V TX LD_SW CDDGND CD3.3V CDR CDAGND CDL
CP606
SD ST/DO/SQCLK SPE CHG_CCW CHG_CW CHG_AD2 CHG_AD1 SW5V SER3 SER2 SER1 DET_OUT -VP SW1 SW2 MIC_GND +9V MIC LED9V NAS_B NAS_A PCONT MUTEA DGND HP_GND HPR HPL HPSW
CP607
TO B
MAIN CIRCUIT (CN302) ON SCHEMATIC DIAGRAM-5
D650
D651
D650-D651 RVD1SS133TA
R998 1.2K
Q601 KRC103MTA POWER RESET SWITCH
R642 22K
EE_CS
SYS6V
R639 100
R640 100
C626 560P
C627 560P
C633 100P
D620
D621
D620-D621 1SS291TA
C628 C636 C637 C638 C629 C630 C624 C625 560P
C639 0.01
Q607 KTC3199GRTA SWITCH OSCILLATOR
R641 47K
C631 0.01
R993 1K
R675 4.7K
R676 4.7K
Q608 KTC3199GRTA SWITCH 32K OSCILLATOR
C644 68P
R677 680
X600 RSXZ4M19D01T
R992 1K
C642 56P
C645 68P
R678 330K
R679 10M
X601 RSXD32K7S02
C640 1000P
C641 1000P
C643 56P
C646 18P
L990-L991 RLQB101JTD-D
C647 15P
C699 0.1
R699 10K
0.022
R687 1K
DVREF+
R674 1K
TO M
TRANS CIRCUIT (CN502) ON SCHEMATIC DIAGRAM-12
SYNC FL1 FL2 SYS6V ECONO
H601/W601
R991 100K
R990 100K
C990 6.3V47
L990
C991 1000P
C992 0.01
R994 120
SW5V
C993 47P
D990 MTZJ5R1BTA
R995 1K
IC990 LC72721NMTLM RDS
X990 RSXC4M33S02T
STBY T3 IDR RDCL RDDA RDS-ID T4 VDD_D VSS_D XIN
VREF MPXIN VDD_A VSS_A FLOUT CIN T1 T2 PCL XOUT
C994 47P
C995 50V10
C996 330P
C997 50V10
C998 560P
L991
SPC SPB SPA CHG_PLGR CHG_HALF DCDET2 DCDET1 PLLDA PLLCLK VREF+ CD PLLCE1 PGND CD7.5V TX CD3.3V CDDGND CDR CDAGND CDL
CP605
TO B
MAIN CIRCUIT (CN303) ON SCHEMATIC DIAGRAM-4

SCHEMATIC DIAGRAM - 4

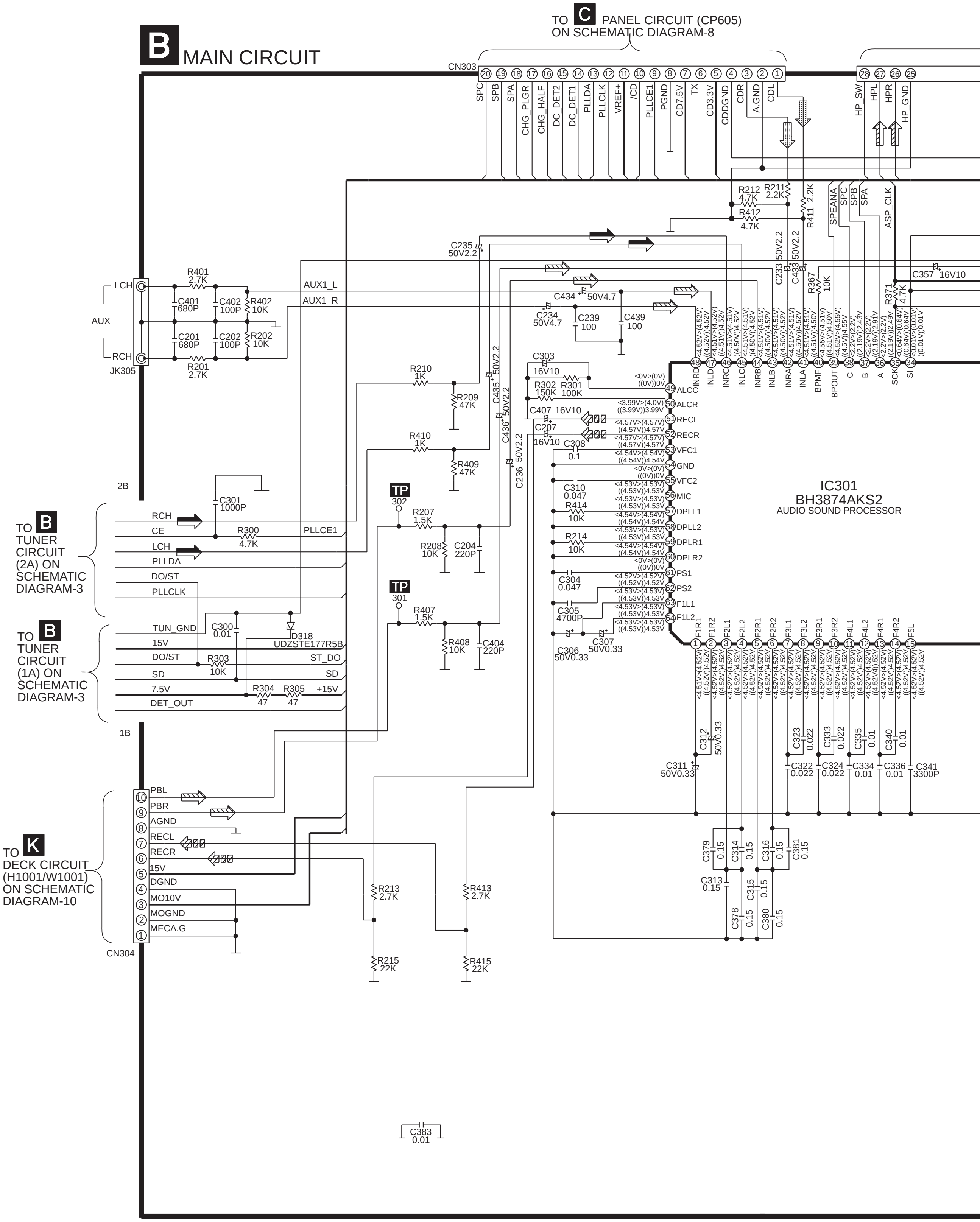
—— : +B SIGNAL LINE

⇨ : MAIN SIGNAL LINE

➡ : FM/AM SIGNAL LINE

⇨ : CD SIGNAL LINE

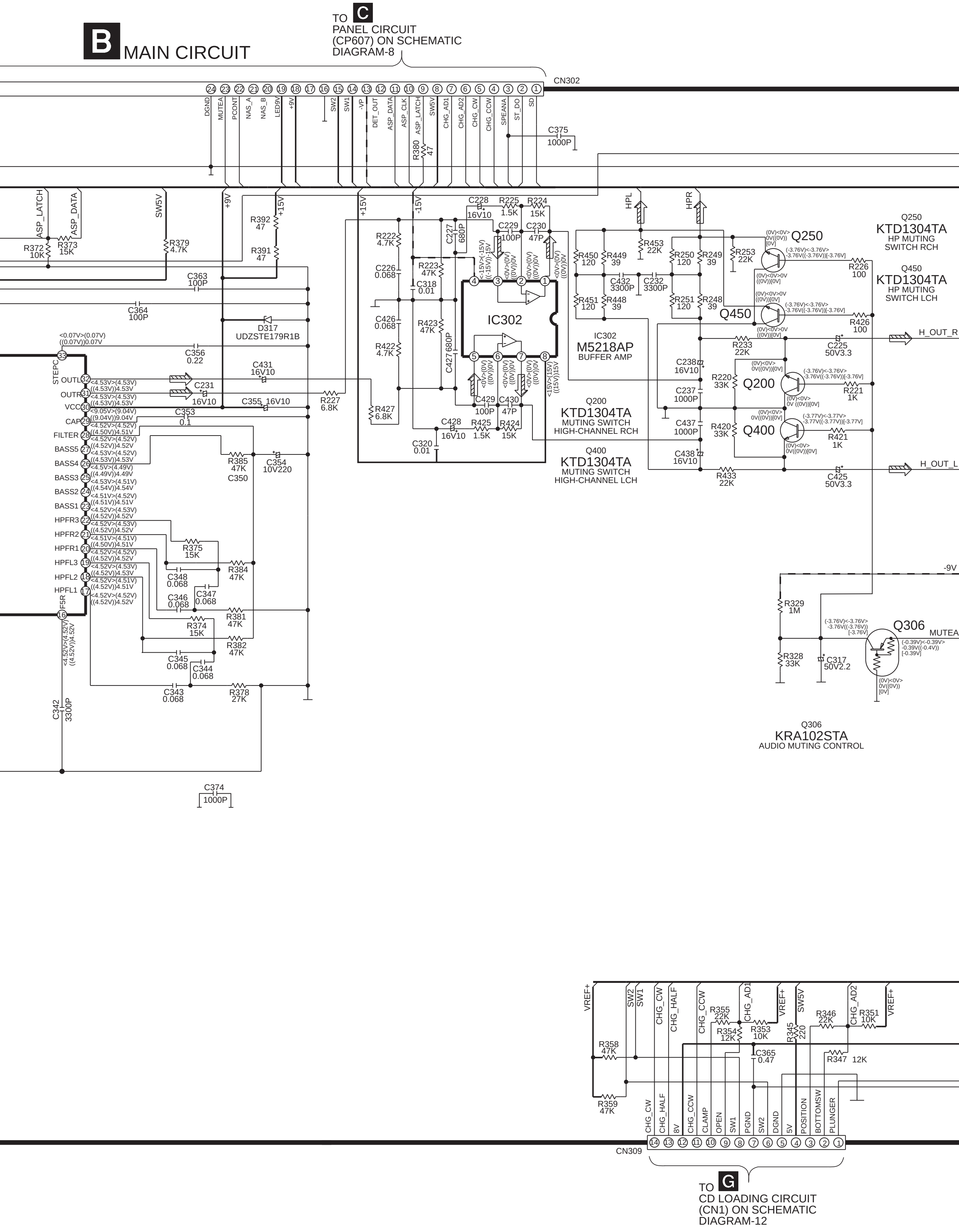
⇦ : RECORD SIGNAL LINE



B MAIN CIRCUIT
TO C PANEL CIRCUIT (CP605) ON SCHEMATIC DIAGRAM-8
CN303
SPC
SPB
SPA
CHG_PLGR
CHG_HALF
DC_DET2
DC_DET1
PLLDA
PLLCLK
VREF+
/CD
PLLCE1
PGND
CD7.5V
TX
CD3.3V
CDDGND
CDR
A.GND
CDL
HP_SW
HPL
HPR
HP_GND
R212 4.7K
R211 2.2K
R412 4.7K
R411 2.2K
SPEANA
ASP_CLK
C235 50V2.2
C233 50V2.2
C433 50V2.2
R367 10K
R371 4.7K
C357 16V10
LCH
RCH
AUX
JK305
R401 2.7K
C401 680P
C402 100P
R402 10K
C201 680P
C202 100P
R202 10K
R201 2.7K
AUX1_L
AUX1_R
C434 50V4.7
C234 50V4.7
C239 100
C439 100
C303 16V10
R302 150K
R301 100K
C407 16V10
C207 16V10
C308 0.1
C310 0.047
R414 10K
R214 10K
C304 0.047
C305 4700P
C306 50V0.33
C307 50V0.33
R210 1K
R209 47K
R410 1K
R409 47K
C435 50V2.2
C436 50V2.2
C236 50V2.2
IC301
BH3874AKS2
AUDIO SOUND PROCESSOR
ALCC
ALCR
RECL
RECR
VFC1
GND
VFC2
MIC
DPLL1
DPLL2
DPLR1
DPLR2
PS1
PS2
F1L1
F1L2
INRD
INLD
INRC
INLC
INRB
INLB
INRA
INLA
BPMF
BPOUT
C
B
A
SCK
SI
F1R1
F1R2
F2L1
F2L2
F2R1
F2R2
F3L1
F3L2
F3R1
F3R2
F4L1
F4L2
F4R1
F4R2
F5L
2B
TO B TUNER CIRCUIT (2A) ON SCHEMATIC DIAGRAM-3
RCH
CE
LCH
PLLDA
DO/ST
PLLCLK
C301 1000P
R300 4.7K
PLLCE1
TP 302
R207 1.5K
R208 10K
C204 220P
TP 301
R407 1.5K
R408 10K
C404 220P
TO B TUNER CIRCUIT (1A) ON SCHEMATIC DIAGRAM-3
TUN_GND
15V
DO/ST
SD
7.5V
DET_OUT
C300 0.01
D318 UDZSTE177R5B
R303 10K
ST_DO
SD
R304 47
R305 47
+15V
1B
TO K DECK CIRCUIT (H1001/W1001) ON SCHEMATIC DIAGRAM-10
PBL
PBR
AGND
RECL
RECR
15V
DGND
MO10V
MOGND
MECA.G
CN304
R213 2.7K
R215 22K
R413 2.7K
R415 22K
C312 50V0.33
C311 50V0.33
C323 0.022
C322 0.022
C333 0.022
C324 0.022
C335 0.01
C334 0.01
C340 0.01
C336 0.01
C341 3300P
C379 0.15
C314 0.15
C316 0.15
C381 0.15
C313 0.15
C315 0.15
C378 0.15
C380 0.15
C383 0.01

SCHEMATIC DIAGRAM - 5

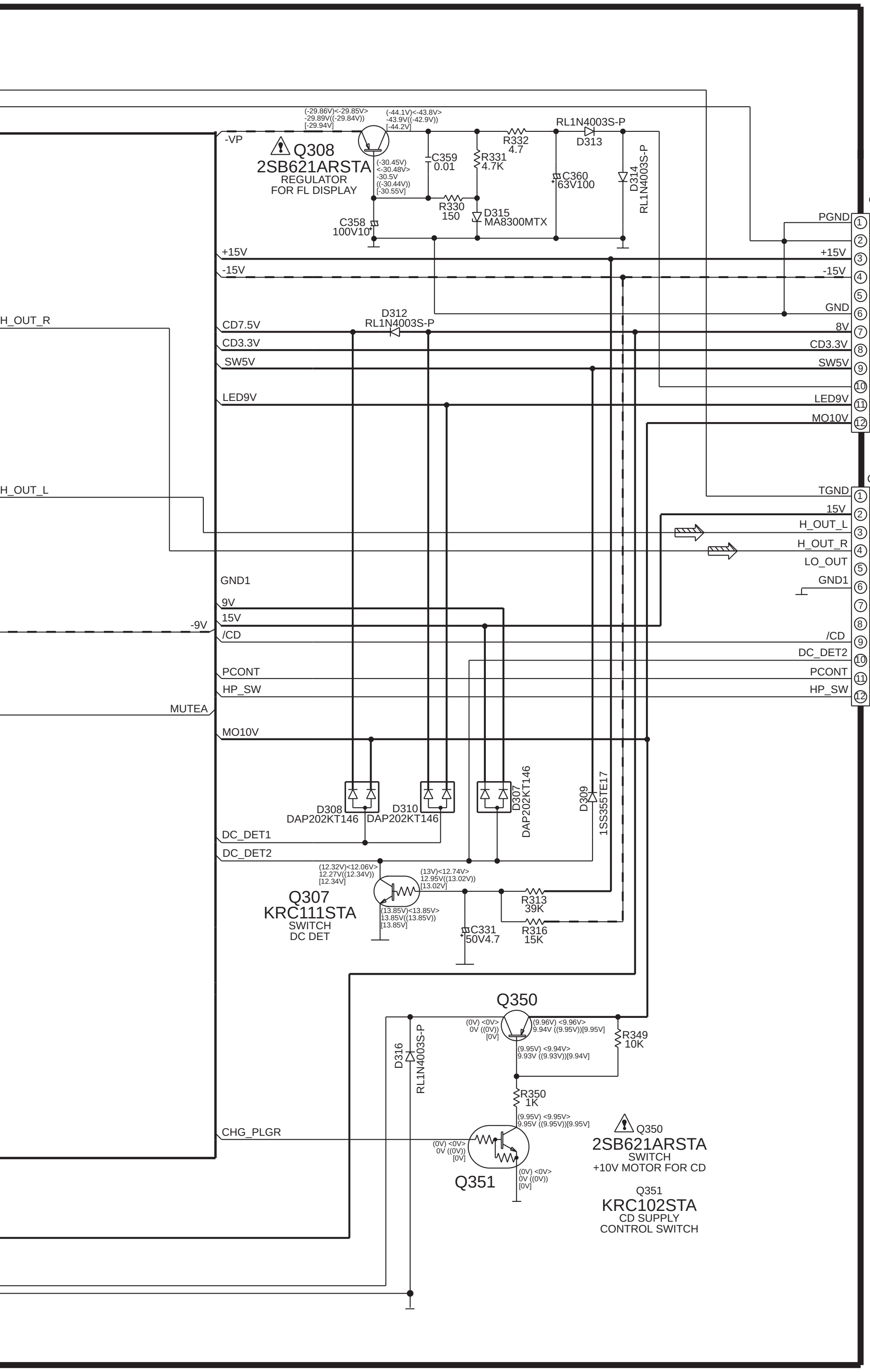
—— : +B SIGNAL LINE　　– – : -B SIGNAL LINE　　⇨ : MAIN SIGNAL LINE


B MAIN CIRCUIT
TO C PANEL CIRCUIT (CP607) ON SCHEMATIC DIAGRAM-8
CN302
DGND
MUTEA
PCONT
NAS_A
NAS_B
LED9V
+9V
SW2
SW1
-VP
DET_OUT
ASP_DATA
ASP_CLK
ASP_LATCH
SW5V
CHG_AD1
CHG_AD2
CHG_CW
CHG_CCW
SPEANA
ST_DO
SD
C375 1000P
R380 47
ASP_LATCH
ASP_DATA
SW5V
R372 10K
R373 15K
R379 4.7K
+9V
+15V
R392 47
R391 47
C363 100P
C364 100P
D317 UDZSTE179R1B
C356 0.22
C431 16V10
C231 16V10
C355 16V10
R227 6.8K
C353 0.1
R385 47K
C354 10V220
C350
STEPC
OUTL
OUTR
VCC
CAP
FILTER
BASS5
BASS4
BASS3
BASS2
BASS1
HPFR3
HPFR2
HPFR1
HPFL3
HPFL2
HPFL1
F5R
R375 15K
R384 47K
C348 0.068
C347 0.068
C346 0.068
R381 47K
R374 15K
R382 47K
C345 0.068
C344 0.068
C343 0.068
R378 27K
C342 3300P
C374 1000P
+15V
-15V
R222 4.7K
C227 680P
C228 16V10
R225 1.5K
R224 15K
C229 100P
C230 47P
C226 0.068
R223 47K
C318 0.01
C426 0.068
R423 47K
R422 4.7K
C427 680P
IC302
R427 6.8K
C429 100P
C430 47P
C428 16V10
R425 1.5K
R424 15K
C320 0.01
IC302 M5218AP BUFFER AMP
Q200 KTD1304TA MUTING SWITCH HIGH-CHANNEL RCH
Q400 KTD1304TA MUTING SWITCH HIGH-CHANNEL LCH
HPL
HPR
R450 120
R449 39
R453 22K
R250 120
R249 39
R253 22K
C432 3300P
C232 3300P
R451 120
R448 39
R251 120
R248 39
Q250
Q450
Q250 KTD1304TA HP MUTING SWITCH RCH
Q450 KTD1304TA HP MUTING SWITCH LCH
R226 100
R426 100
H_OUT_R
R233 22K
C225 50V3.3
C238 16V10
C237 1000P
R220 33K
Q200
R221 1K
C437 1000P
R420 33K
Q400
R421 1K
C438 16V10
R433 22K
C425 50V3.3
H_OUT_L
-9V
R329 1M
R328 33K
C317 50V2.2
Q306
MUTEA
Q306 KRA102STA AUDIO MUTING CONTROL
VREF+
SW2
SW1
CHG_CW
CHG_HALF
CHG_CCW
R355 22K
R354 12K
CHG_AD1
R353 10K
VREF+
SW5V
R345 220
R346 22K
CHG_AD2
R351 10K
VREF+
R358 47K
C365 0.47
R347 12K
R359 47K
CHG_CW
CHG_HALF
8V
CHG_CCW
CLAMP
OPEN
SW1
PGND
SW2
DGND
5V
POSITION
BOTTOMSW
PLUNGER
CN309
TO G CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM-12

SCHEMATIC DIAGRAM - 6

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

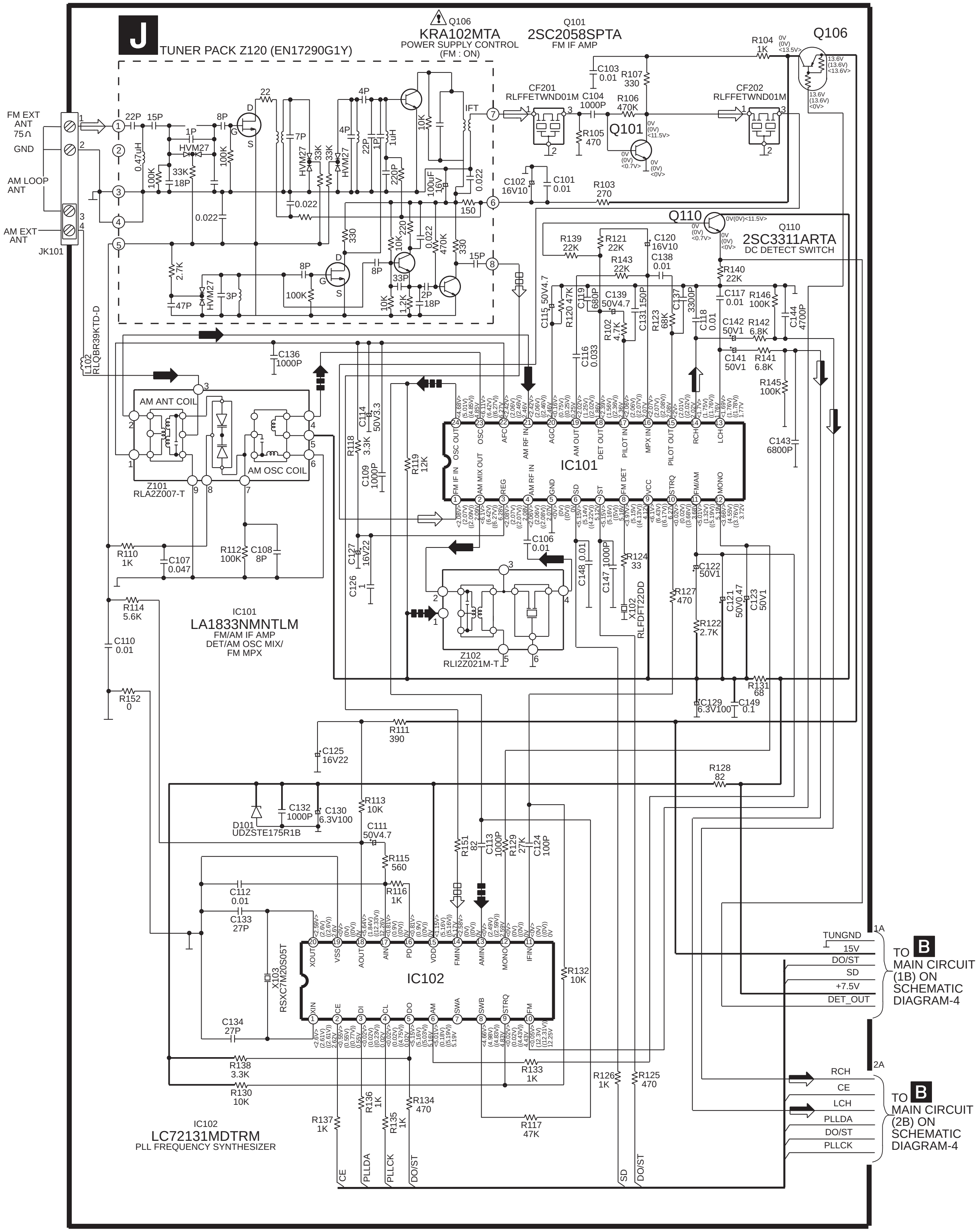
B MAIN CIRCUIT


-VP
(-29.86V)<-29.85V>
-29.89V((-29.84V))
[-29.94V]
(-44.1V)<-43.8V>
-43.9V((-42.9V))
[-44.2V]
Q308
2SB621ARSTA
REGULATOR
FOR FL DISPLAY
(-30.45V)
<-30.48V>
-30.5V
((-30.44V))
[-30.55V]
C359
0.01
R332
4.7
R331
4.7K
RL1N4003S-P
D313
C360
63V100
D314
RL1N4003S-P
R330
150
D315
MA8300MTX
C358
100V10
CN301
PGND ①
②
+15V ③
-15V ④
⑤
GND ⑥
8V ⑦
CD3.3V ⑧
SW5V ⑨
⑩
LED9V ⑪
MO10V ⑫
TO L
POWER CIRCUIT
(CP500) ON
SCHEMATIC
DIAGRAM-11
+15V
-15V
H_OUT_R
D312
RL1N4003S-P
CD7.5V
CD3.3V
SW5V
LED9V
H_OUT_L
CN300
TGND ①
15V ②
H_OUT_L ③
H_OUT_R ④
LO_OUT ⑤
GND1 ⑥
⑦
⑧
/CD ⑨
DC_DET2 ⑩
PCONT ⑪
HP_SW ⑫
TO L
POWER CIRCUIT
(CP501) ON
SCHEMATIC
DIAGRAM-11
GND1
9V
15V
-9V
/CD
PCONT
HP_SW
MUTEA
MO10V
D308
DAP202KT146
D310
DAP202KT146
D307
DAP202KT146
D309
1SS355TE17
DC_DET1
DC_DET2
(12.32V)<12.06V>
12.27V((12.34V))
[12.34V]
(13V)<12.74V>
12.95V((13.02V))
[13.02V]
Q307
KRC111STA
SWITCH
DC DET
(13.85V)<13.85V>
13.85V((13.85V))
[13.85V]
C331
50V4.7
R313
39K
R316
15K
Q350
(0V) <0V>
0V ((0V))
[0V]
(9.96V) <9.96V>
9.94V ((9.95V))[9.95V]
(9.95V) <9.94V>
9.93V ((9.93V))[9.94V]
R349
10K
D316
RL1N4003S-P
R350
1K
(9.95V) <9.95V>
9.95V ((9.95V))[9.95V]
CHG_PLGR
(0V) <0V>
0V ((0V))
[0V]
Q351
(0V) <0V>
0V ((0V))
[0V]
Q350
2SB621ARSTA
SWITCH
+10V MOTOR FOR CD
Q351
KRC102STA
CD SUPPLY
CONTROL SWITCH

SCHEMATIC DIAGRAM - 3

―― : +B SIGNAL LINE
⇨ : FM SIGNAL LINE
⇨ : FM OSC SIGNAL LINE
➡ : AM SIGNAL LINE
➡ : AM OSC SIGNAL LINE
⇨ : FM/AM SIGNAL LINE

B MAIN/TUNER CIRCUIT

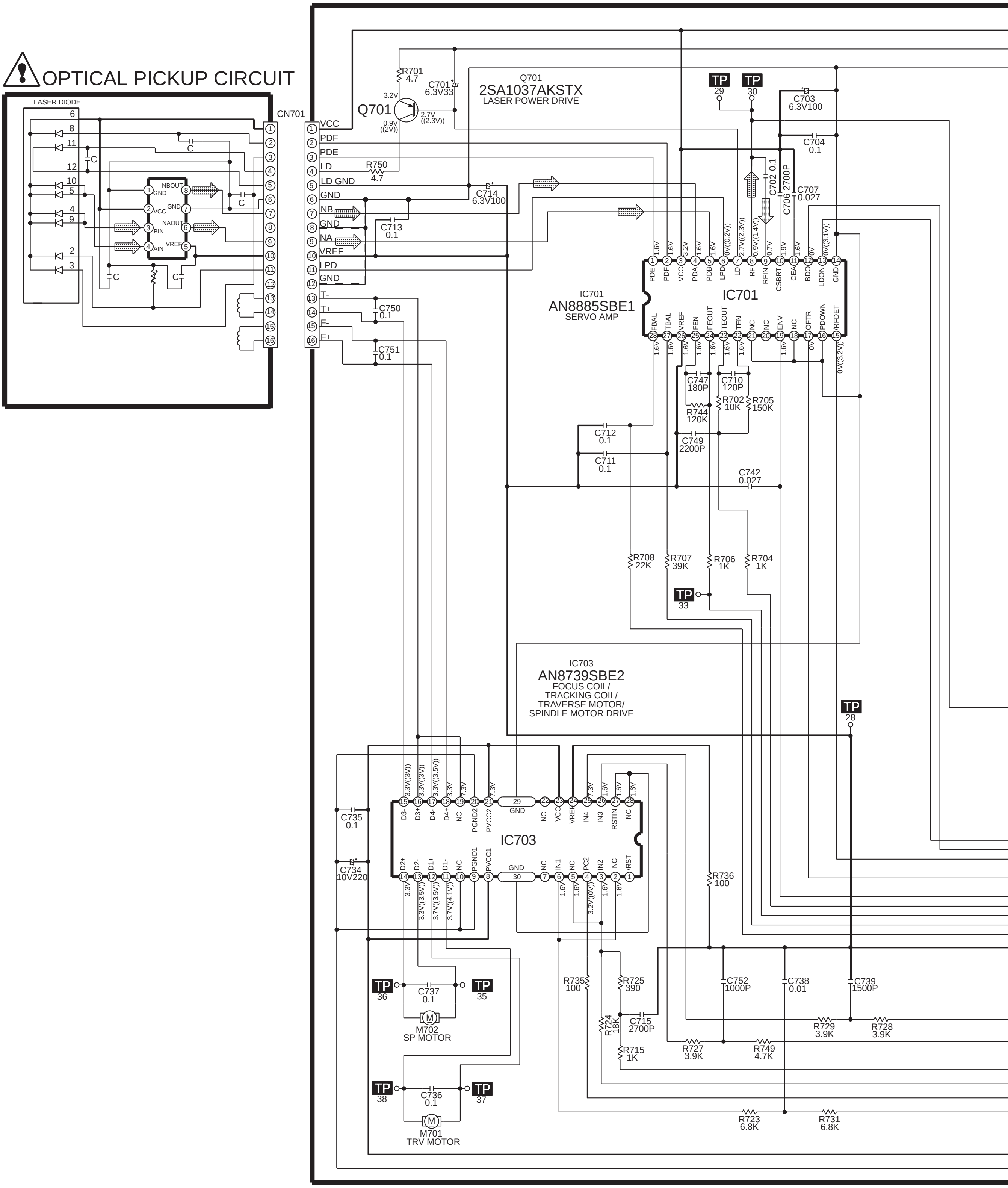

J TUNER PACK Z120 (EN17290G1Y)
Q106 KRA102MTA POWER SUPPLY CONTROL (FM : ON)
Q101 2SC2058SPTA FM IF AMP
Q106
Q110 2SC3311ARTA DC DETECT SWITCH
FM EXT ANT 75Ω
GND
AM LOOP ANT
AM EXT ANT
JK101
CF201 RLFFETWND01M
CF202 RLFFETWND01M
C103 0.01
R107 330
R104 1K
C104 1000P
R106 470K
R105 470
C102 16V10
C101 0.01
R103 270
IFT
HVM27
R139 22K
R121 22K
C120 16V10
R143 22K
C138 0.01
R140 22K
C117 0.01
R146 100K
C144 4700P
C142 50V1
R142 6.8K
C141 50V1
R141 6.8K
R145 100K
C143 6800P
C115 50V4.7
R120 47K
C119 680P
C139 50V4.7
R102 4.7K
C131 150P
R123 68K
C137 3300P
C118 0.01
C116 0.033
C136 1000P
L102 RLQBR39KTD-D
AM ANT COIL
Z101 RLA2Z007-T
AM OSC COIL
R110 1K
C107 0.047
R112 100K
C108 8P
R118 3.3K
C114 50V3.3
C109 1000P
R119 12K
IC101
OSC OUT
OSC
AFC
AM RF IN
AGC
AM OUT
DET OUT
PILOT IN
MPX IN
PILOT OUT
RCH
LCH
FM IF IN
AM MIX OUT
REG
AM RF IN
GND
SD
ST
FM DET
VCC
STRQ
FM/AM
MONO
C106 0.01
C127 16V22
C126 1
C148 0.01
C147 1000P
R124 33
X102 RLFDFT22DD
R127 470
C122 50V1
C121 50V0.47
C123 50V1
R122 2.7K
R131 68
C129 6.3V100
C149 0.1
Z102 RLI2Z021M-T
R114 5.6K
C110 0.01
R152 0
IC101 LA1833NMNTLM FM/AM IF AMP DET/AM OSC MIX/ FM MPX
R111 390
C125 16V22
R128 82
D101 UDZSTE175R1B
C132 1000P
C130 6.3V100
R113 10K
C111 50V4.7
R115 560
R116 1K
C112 0.01
C133 27P
R151 82
C113 1000P
R129 27K
C124 100P
X103 RSXC7M20S05T
IC102
XOUT
VSS
AOUT
AIN
PD
VDD
FMIN
AMIN
MONO
IFIN
XIN
CE
DI
CL
DO
AM
SWA
SWB
STRQ
FM
R132 10K
C134 27P
R138 3.3K
R130 10K
R133 1K
R126 1K
R125 470
R136 1K
R134 470
R137 1K
R135 1K
R117 47K
IC102 LC72131MDTRM PLL FREQUENCY SYNTHESIZER
CE
PLLDA
PLLCK
DO/ST
SD
DO/ST
1A
TUNGND
15V
DO/ST
SD
+7.5V
DET_OUT
TO B MAIN CIRCUIT (1B) ON SCHEMATIC DIAGRAM-4
2A
RCH
CE
LCH
PLLDA
DO/ST
PLLCK
TO B MAIN CIRCUIT (2B) ON SCHEMATIC DIAGRAM-4

SCHEMATIC DIAGRAM -1

: +B SIGNAL LINE

: CD SIGNAL LINE

A CD SERVO CIRCUIT

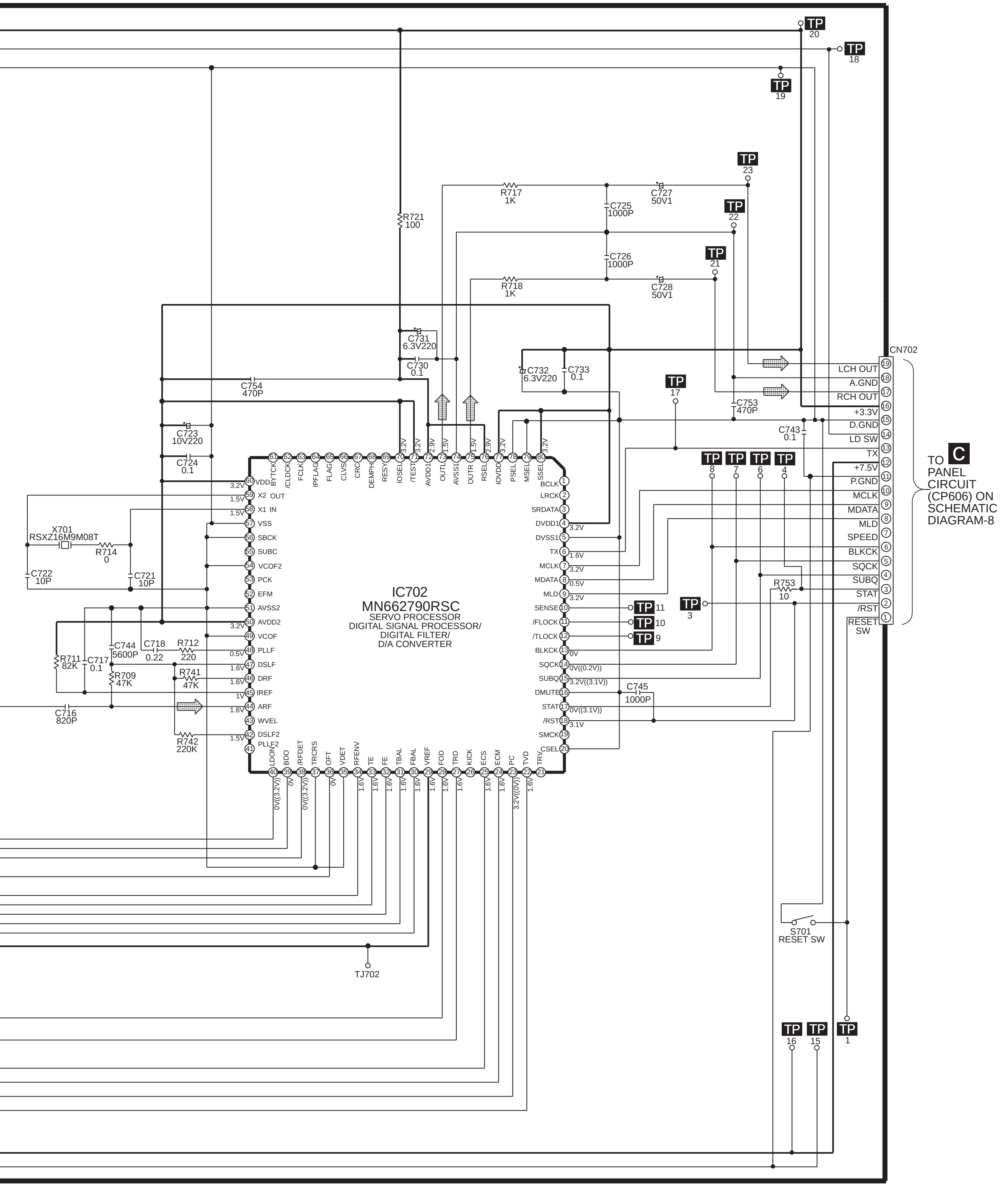

OPTICAL PICKUP CIRCUIT
LASER DIODE
NBOUT
GND
VCC
NAOUT
BIN
AIN
VREF
C
CN701
VCC
PDF
PDE
LD
LD GND
GND
NB
GND
NA
VREF
LPD
GND
T-
T+
F-
F+
R701
4.7
C701
6.3V33
Q701
3.2V
0.9V
((2V))
2.7V
((2.3V))
Q701
2SA1037AKSTX
LASER POWER DRIVE
R750
4.7
C714
6.3V100
C713
0.1
C750
0.1
C751
0.1
TP
29
TP
30
C703
6.3V100
C704
0.1
C702 0.1
C706 2700P
C707
0.027
IC701
AN8885SBE1
SERVO AMP
IC701
PDE
PDF
VCC
PDA
PDB
LPD
LD
RF
RFIN
CSBRT
CEA
BDO
LDON
GND
FBAL
TBAL
VREF
FEN
FEOUT
TEOUT
TEN
NC
NC
ENV
NC
OFTR
PDOWN
RFDET
C747
180P
C710
120P
R744
120K
R702
10K
R705
150K
C712
0.1
C749
2200P
C711
0.1
C742
0.027
R708
22K
R707
39K
R706
1K
R704
1K
TP
33
IC703
AN8739SBE2
FOCUS COIL/
TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
TP
28
IC703
D3-
D3+
D4-
D4+
NC
PGND2
PVCC2
GND
NC
VCC
VREF
IN4
IN3
RSTIN
NC
D2+
D2-
D1+
D1-
NC
PGND1
PVCC1
GND
NC
IN1
NC
PC2
IN2
NC
RST
C735
0.1
C734
10V220
R736
100
R735
100
R725
390
R724
18K
C715
2700P
R715
1K
C752
1000P
C738
0.01
C739
1500P
R727
3.9K
R749
4.7K
R729
3.9K
R728
3.9K
R723
6.8K
R731
6.8K
TP
36
C737
0.1
TP
35
M702
SP MOTOR
TP
38
C736
0.1
TP
37
M701
TRV MOTOR

SCHEMATIC DIAGRAM - 2

: +B SIGNAL LINE

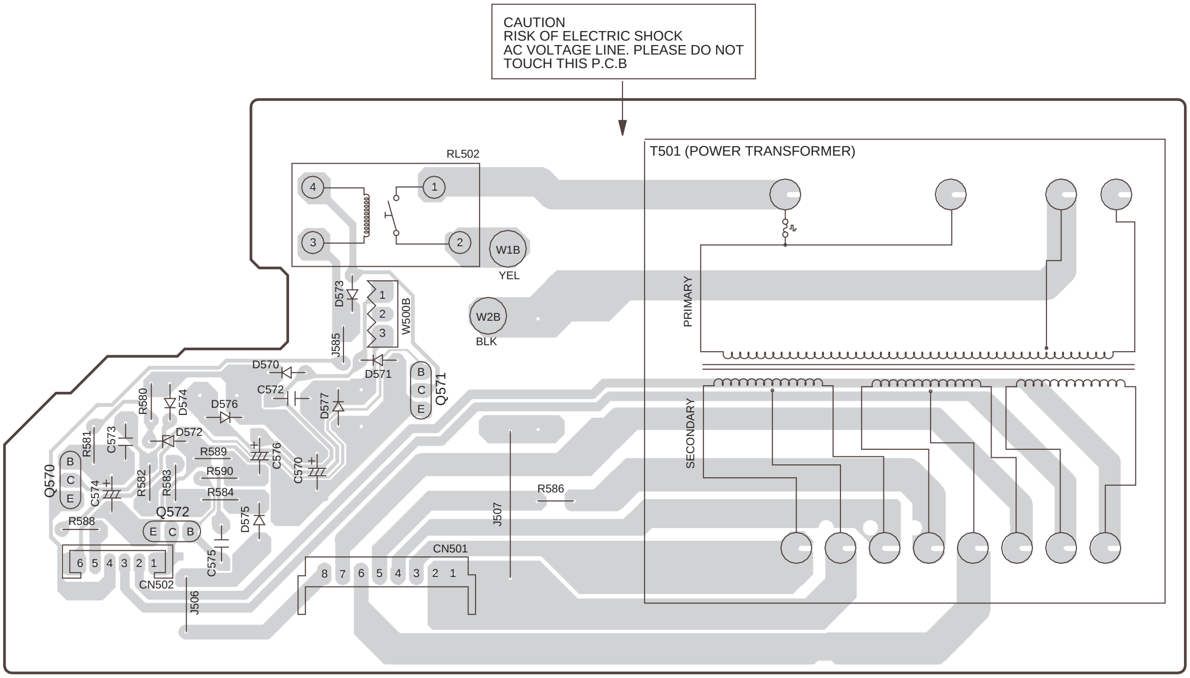
: CD SIGNAL LINE

A CD SERVO CIRCUIT



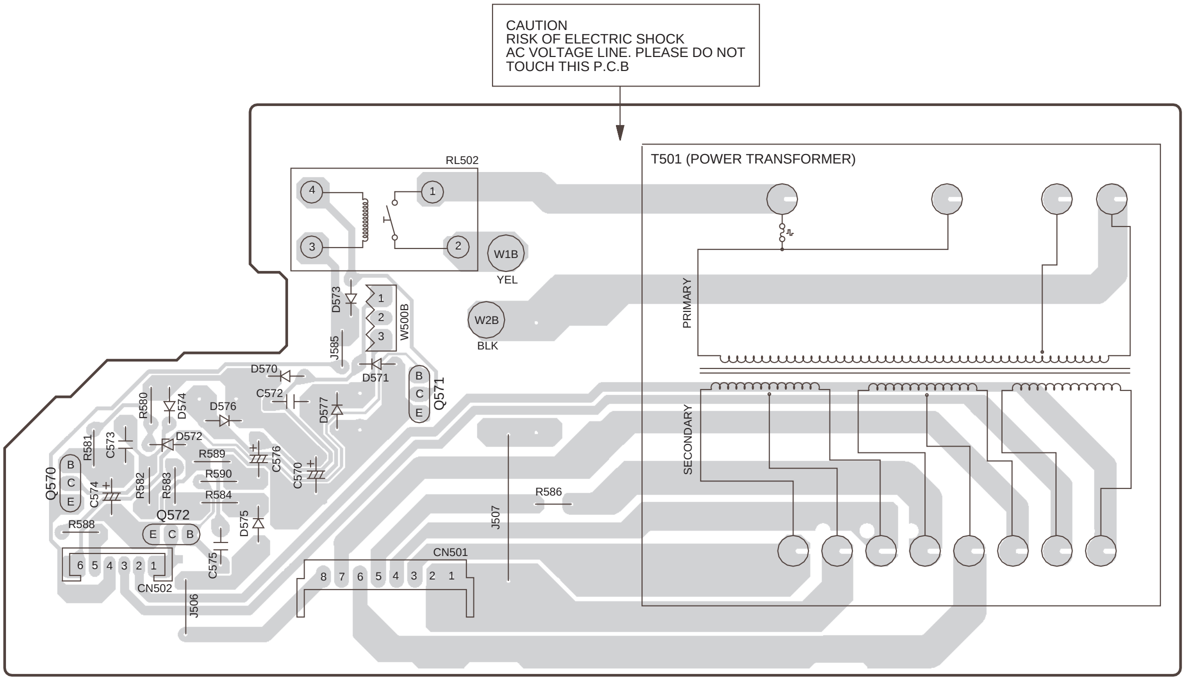
IC702
MN662790RSC
SERVO PROCESSOR
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
CN702
LCH OUT
A.GND
RCH OUT
+3.3V
D.GND
LD SW
TX
+7.5V
P.GND
MCLK
MDATA
MLD
SPEED
BLKCK
SQCK
SUBQ
STAT
/RST
RESET SW
TO C PANEL CIRCUIT (CP606) ON SCHEMATIC DIAGRAM-8
TP 20
TP 18
TP 19
TP 23
TP 22
TP 21
TP 17
TP 8
TP 7
TP 6
TP 4
TP 3
TP 11
TP 10
TP 9
TP 16
TP 15
TP 1
R717 1K
R718 1K
C725 1000P
C726 1000P
C727 50V1
C728 50V1
R721 100
C731 6.3V220
C730 0.1
C732 6.3V220
C733 0.1
C753 470P
C743 0.1
C754 470P
C723 10V220
C724 0.1
X701 RSXZ16M9M08T
R714 0
C722 10P
C721 10P
C744 5600P
C718 0.22
R712 220
R711 82K
C717 0.1
R709 47K
R741 47K
R742 220K
C716 820P
R753 10
C745 1000P
S701 RESET SW
TJ702
BYTCK
/CLDCK
FCLK
IPFLAG
FLAG
CLVS
CRC
DEMPH
RESY
IOSEL
/TEST
AVDD1
OUTL
AVSS1
OUTR
RSEL
IOVDD
PSEL
MSEL
SSEL
BCLK
LRCK
SRDATA
DVDD1
DVSS1
TX
MCLK
MDATA
MLD
SENSE
/FLOCK
/TLOCK
BLKCK
SQCK
SUBQ
DMUTE
STAT
/RST
SMCK
CSEL
VDD
X2 OUT
X1 IN
VSS
SBCK
SUBC
VCOF2
PCK
EFM
AVSS2
AVDD2
VCOF
PLLF
DSLF
DRF
IREF
ARF
WVEL
DSLF2
PLLF2
LDON
BDO
/RFDET
TRCRS
OFT
VDET
RFENV
TE
FE
TBAL
FBAL
VREF
FOD
TRD
KICK
ECS
ECM
PC
TVD
TRV
3.2V
2.9V
1.5V
1.6V
0.5V
1V
0V
0V((0.2V))
3.2V((3.1V))
0V((3.1V))
3.1V
0V((3.2V))
3.2V((0V))

M AC TRANSFORMER P.C.B. (REPX0256C...EG)


CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B

T501 (POWER TRANSFORMER)
PRIMARY
SECONDARY
RL502
4
1
3
2
W1B
YEL
W2B
BLK
D573
W500B
1
2
3
J585
D570
D571
Q571
B
C
E
C572
D577
R580
D574
D576
D572
R581
C573
R589
C576
R590
C570
Q570
B
C
E
C574
R582
R583
R584
Q572
E C B
R588
D575
C575
6 5 4 3 2 1
CN502
J506
CN501
8 7 6 5 4 3 2 1
J507
R586

M AC TRANSFORMER P.C.B. (REPX0256D...E/EB)

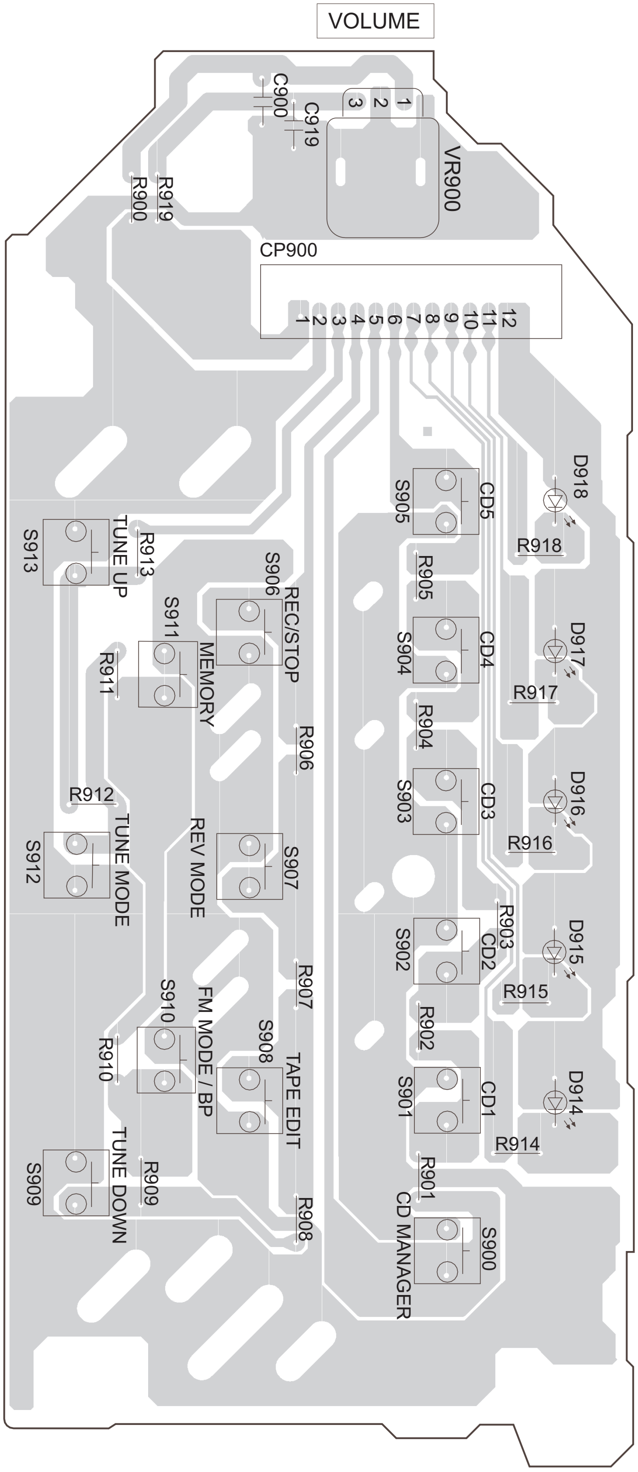

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B

T501 (POWER TRANSFORMER)
PRIMARY
SECONDARY
RL502
4
1
3
2
W1B
YEL
W2B
BLK
D573
W500B
1
2
3
J585
D570
D571
Q571
B
C
E
C572
D577
R580
D574
D576
D572
R581
C573
R589
C576
R590
C570
Q570
B
C
E
C574
R582
R583
R584
Q572
E C B
R588
D575
C575
6 5 4 3 2 1
CN502
J506
CN501
8 7 6 5 4 3 2 1
J507
R586

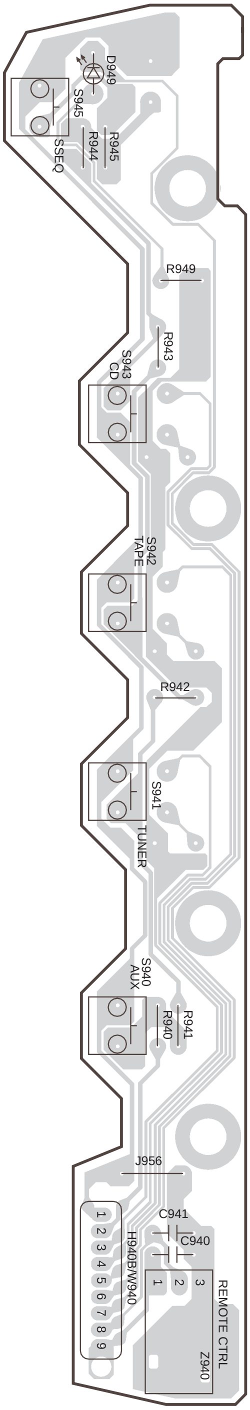
A B C D E F G

1 2 3 4 5 6 7 8 9

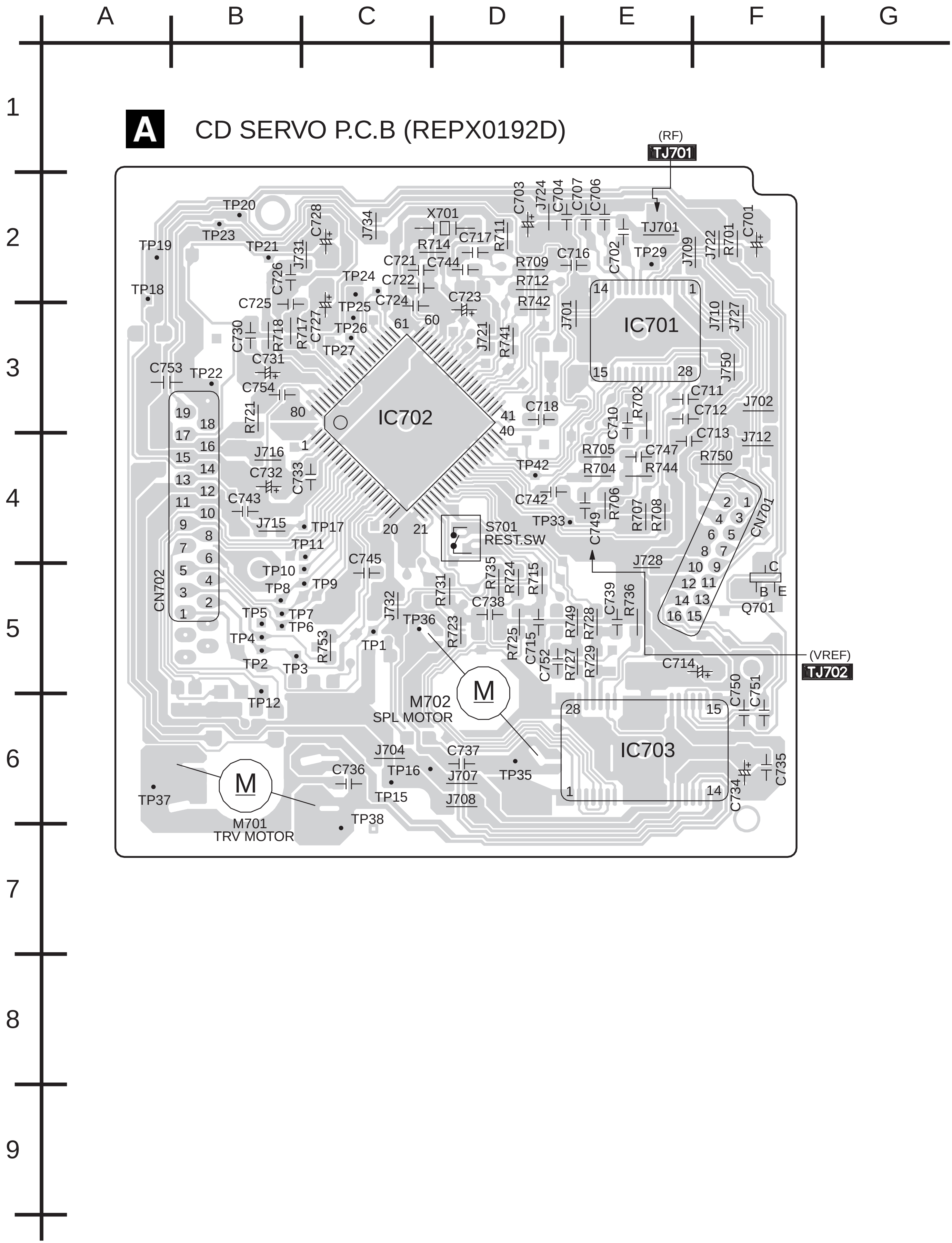
D TACT SWITCH (2) P.C.B. (REPX0254B)


VOLUME
C900
C919
1
2
3
VR900
R900
R919
CP900
1
2
3
4
5
6
7
8
9
10
11
12
D918
S905
CD5
R918
R905
S913
TUNE UP
R913
S906
REC/STOP
S911
MEMORY
R911
S904
CD4
D917
R917
R904
R906
S903
CD3
D916
R916
R912
S912
TUNE MODE
REV MODE
S907
R903
S902
CD2
D915
R915
R907
S910
FM MODE / BP
S908
TAPE EDIT
R910
R902
S901
CD1
D914
R914
S909
TUNE DOWN
R909
R901
R908
CD MANAGER
S900

P TACT SWITCH (1) P.C.B. (REPX0254B)


D949
S945
SSEQ
R944
R945
R949
R943
S943
CD
S942
TAPE
R942
S941
TUNER
S940
AUX
R941
R940
J956
C941
C940
H940B/W940
1
2
3
4
5
6
7
8
9
1
2
3
REMOTE CTRL
Z940

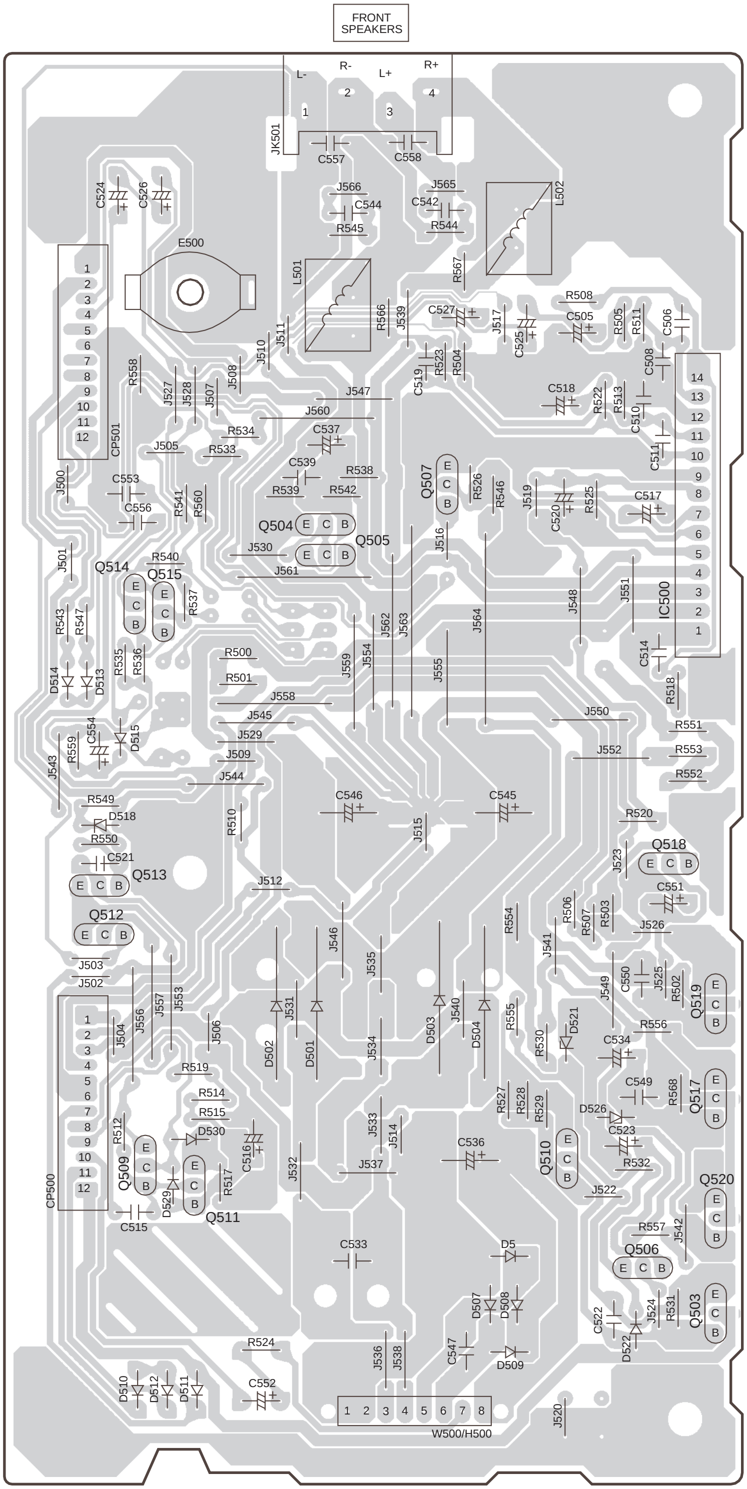
A CD SERVO P.C.B (REPX0192D)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
(RF)
TJ701
(VREF)
TJ702
TP20
TP23
TP19
TP21
TP18
J731
C728
C726
C725
C727
C730
R718
R717
C731
C753
TP22
C754
R721
J716
C732
C733
C743
J715
TP17
TP11
TP10
TP9
TP8
TP5
TP7
TP6
TP4
TP2
TP3
TP12
R753
TP1
J732
C745
J734
X701
R714
C717
R711
C721
C744
C722
TP24
C724
C723
TP25
TP26
TP27
61
60
80
1
20
21
41
40
IC702
J721
R741
C703
J724
C704
C707
C706
C702
R709
C716
R712
R742
J701
TJ701
TP29
J709
J722
R701
C701
IC701
14
1
15
28
J710
J727
J750
C711
C712
C713
J702
J712
C718
C710
R702
R705
C747
R704
R744
R750
TP42
C742
R706
R707
R708
C749
TP33
S701
REST.SW
CN701
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
J728
C
B
E
Q701
R735
R724
R715
R731
C738
R723
R725
C715
C752
R727
R749
R729
R728
C739
R736
C714
TP36
M
M702
SPL MOTOR
IC703
28
15
1
14
C750
C751
C734
C735
J704
TP16
C737
J707
J708
TP35
C736
TP15
TP37
M
M701
TRV MOTOR
TP38
CN702
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

A B C D E F G

1 2 3 4 5 6 7 8 9

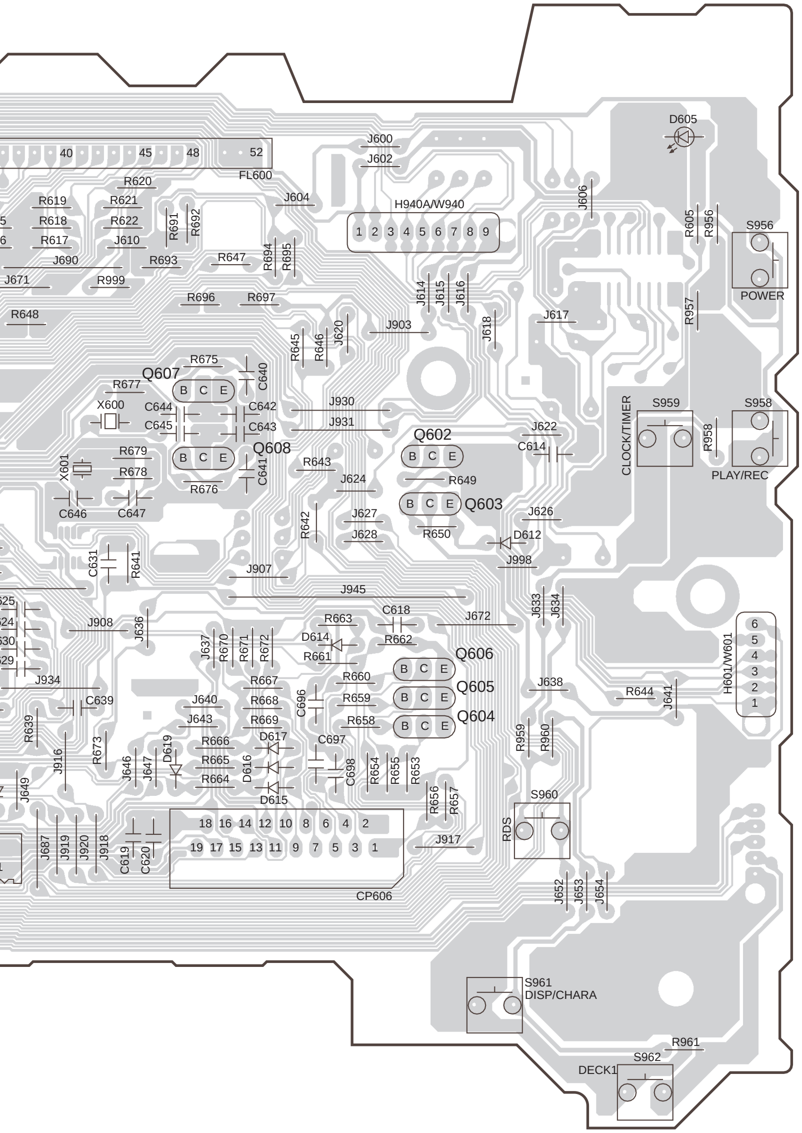
L POWER P.C.B. (REPX0253C)



FRONT SPEAKERS
L-
R-
L+
R+
1
2
3
4
JK501
C557
C558
J566
C544
R545
J565
C542
R544
L502
C524
C526
E500
CP501
1
2
3
4
5
6
7
8
9
10
11
12
L501
R567
R508
C505
R505
R511
C506
R566
J539
C527
J517
C525
J511
J510
C523
R504
C519
C508
R558
J527
J528
J507
J508
J547
C518
R522
R513
C510
C511
IC500
14
13
12
11
10
9
8
7
6
5
4
3
2
1
J560
R534
C537
J505
R533
C539
R538
R539
R542
Q507
E
C
B
R526
R546
J519
C520
R525
C517
J500
C553
C556
R541
R560
Q504
E C B
Q505
E C B
J530
J561
J516
J501
Q514
Q515
R540
R537
J548
J551
R543
R547
J562
J563
J564
C514
R500
R501
J559
J554
J555
R535
R536
D514
D513
R518
J558
J545
J529
J509
J544
J550
R551
J552
R553
R552
C554
D515
R559
J543
R549
D518
R550
C521
Q513
E C B
C546
C545
R520
J510
J515
Q518
E C B
J523
C551
J512
Q512
E C B
R506
R507
R503
J526
R554
J541
J546
J535
J503
J502
J549
C550
J525
R502
Q519
J504
J556
J557
J553
J506
D502
J531
D501
J534
D503
J540
D504
R555
R530
D521
C534
R556
CP500
R519
R514
R515
D530
C516
R512
Q509
D529
Q511
R517
J532
J533
J514
J537
C536
R527
R528
R529
Q510
C549
R568
Q517
D526
C523
R532
J522
Q520
C515
R557
J542
Q506
E C B
C533
D5
D507
D508
C522
J524
R531
Q503
D522
R524
J536
J538
C547
D509
D510
D512
D511
C552
1 2 3 4 5 6 7 8
W500/H500
J520

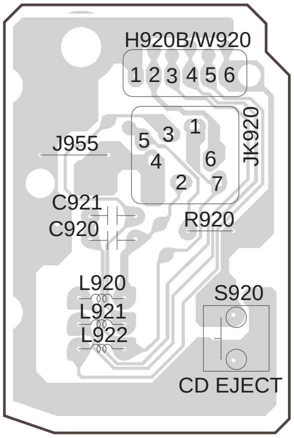
G H I J K L M

O HEADPHONE P.C.B. (REPX0254B)



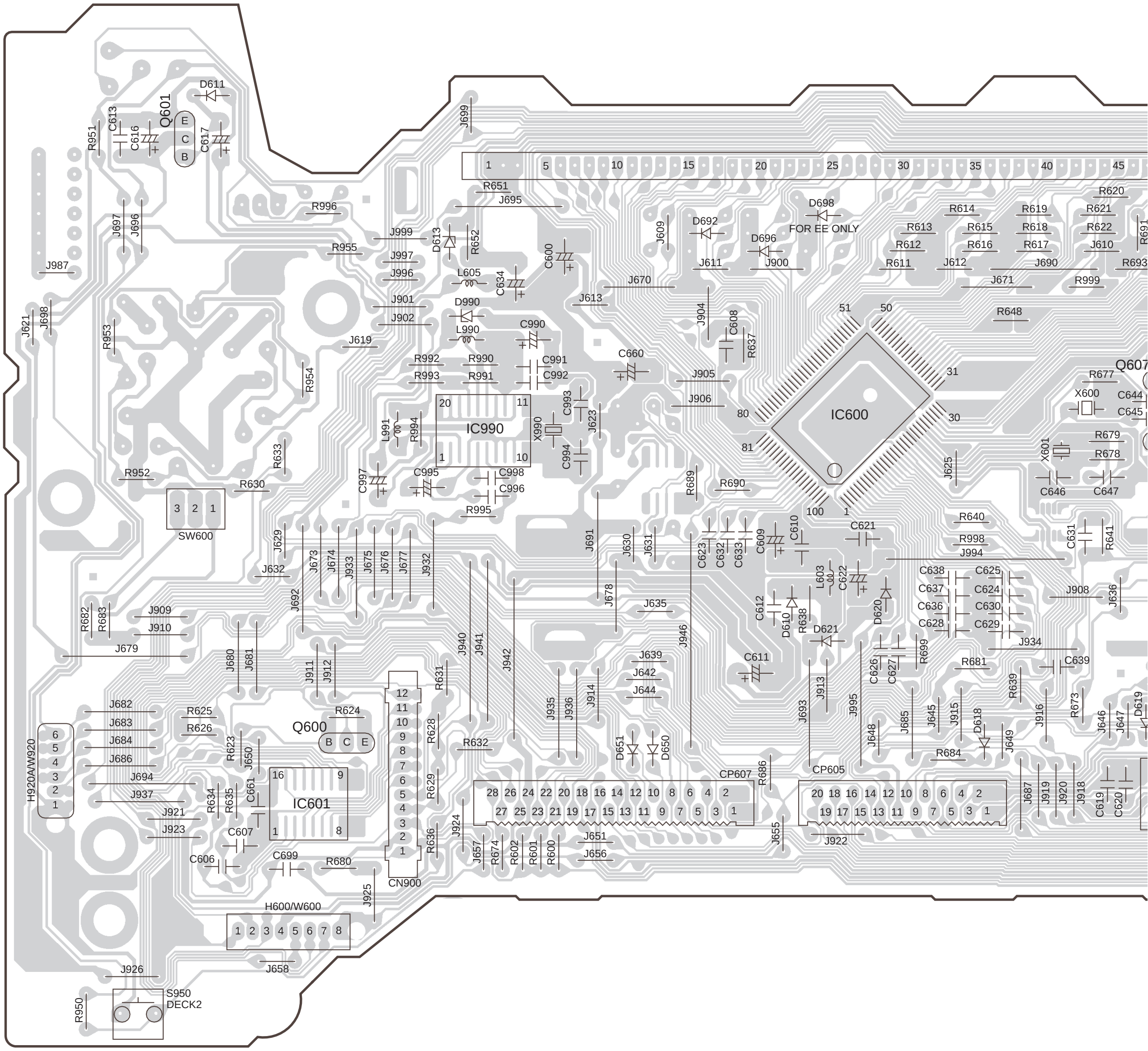
D605
J600
J602
40
45
48
52
FL600
R620
R619
R621
R618
R622
R617
J610
R691
R692
J604
H940A/W940
1 2 3 4 5 6 7 8 9
J606
R605
R956
S956
POWER
J690
R693
R647
R694
R695
J671
R999
R696
R697
J614
J615
J616
R957
R648
J620
J903
J618
J617
R645
R646
R675
Q607
C640
R677
B C E
X600
C644
C642
C645
C643
J930
J931
CLOCK/TIMER
S959
S958
R958
PLAY/REC
Q602
J622
C614
R679
Q608
X601
R678
R643
C641
R676
J624
R649
C646
C647
Q603
J627
J626
R642
J628
R650
D612
J998
C631
R641
J907
J945
J633
J634
J908
J636
R663
C618
J672
D614
R662
H601/W601
6 5 4 3 2 1
J637
R670
R671
R672
R661
Q606
R667
R660
J638
R644
J641
C639
J934
J640
R668
R659
Q605
C696
J643
R669
R658
Q604
R639
R959
R960
D617
C697
J916
R673
D619
R666
R665
D616
R664
C698
R654
R655
R653
J646
J647
J649
D615
R656
R657
S960
RDS
18 16 14 12 10 8 6 4 2
19 17 15 13 11 9 7 5 3 1
J687
J919
J920
J918
C619
C620
J917
CP606
J652
J653
J654
S961
DISP/CHARA
R961
S962
DECK1

HEADPHONES

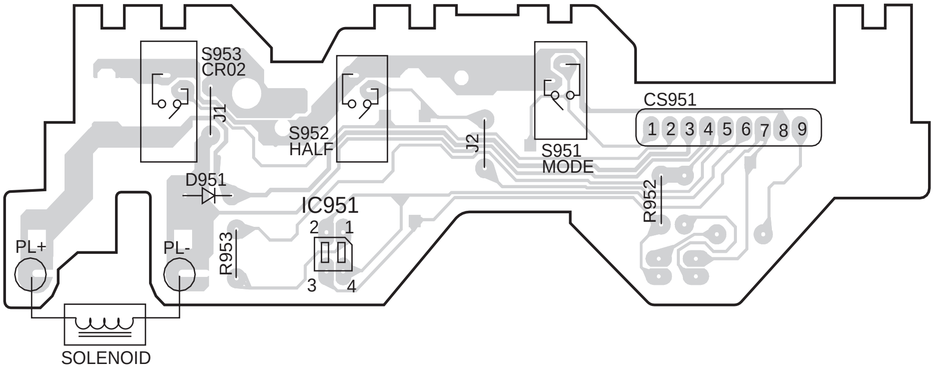


H920B/W920
1 2 3 4 5 6
J955
5 3 1
4 6
2 7
JK920
C921
C920
R920
L920
L921
L922
S920
CD EJECT

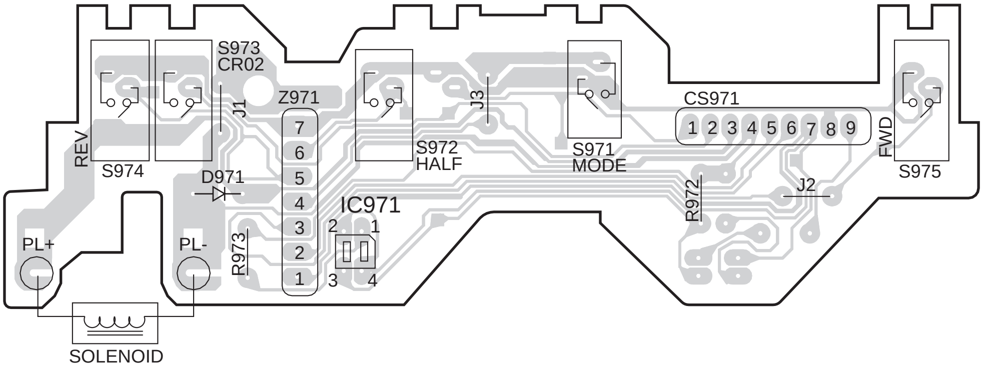
C PANEL P.C.B. (REPX0254B)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
D611
Q601
E
C
B
R951
C613
C616
C617
J699
1
5
10
15
20
25
30
35
40
45
R651
J695
R620
R996
D698
FOR EE ONLY
R614
R619
R621
J697
J696
J999
D613
R652
D692
J609
R613
R615
R618
R622
R955
J997
C600
D696
R612
R616
R617
J610
R691
J987
J996
L605
J611
J900
R611
J612
J690
R693
C634
J670
J671
R999
J901
D990
J613
J904
51
50
R648
J621
J698
R953
J902
L990
C990
C608
R637
J619
R992
R990
C991
C660
31
Q607
R993
R991
C992
J905
R677
R954
20
11
C993
J906
X600
C644
IC990
80
IC600
30
C645
L991
R994
X990
J623
R633
1
10
C994
81
X601
R679
J625
R678
R952
C997
C995
C998
C996
R689
R690
C646
C647
R630
3
2
1
R995
100
1
R640
SW600
J629
J673
J674
J933
J675
J676
J677
J932
J691
J630
J631
C623
C632
C633
C609
C610
C621
R998
C631
R641
J632
J994
C638
C625
L603
C622
C637
C624
J908
J636
J692
J678
J635
C612
C636
C630
R682
R683
J909
J910
D620
D610
R638
D621
C628
C629
J940
J941
J942
J946
J934
J679
J639
C611
C626
C627
R699
R681
C639
J680
J681
J911
J912
J642
J913
J682
J644
R639
R625
R624
12
R631
J935
J936
J914
J995
J693
R673
J646
J647
D619
6
J683
11
J648
J685
J645
J915
D618
J649
J916
Q600
10
R628
R626
5
J684
B
C
E
9
R632
D651
D650
R684
H920A/W920
4
R623
J650
8
J686
3
J694
16
9
7
CP607
CP605
R686
J687
J919
J920
J918
2
J937
R634
R635
C661
6
28
26
24
22
20
18
16
14
12
10
8
6
4
2
20
18
16
14
12
10
8
6
4
2
C619
C620
1
IC601
5
R629
J921
4
27
25
23
21
19
17
15
13
11
9
7
5
3
1
19
17
15
13
11
9
7
5
3
1
J923
3
J924
1
8
2
J655
C607
R636
J922
J651
C606
C699
R680
1
J657
R674
R602
R601
R600
J656
CN900
J925
H600/W600
1
2
3
4
5
6
7
8
J926
J658
S950
DECK2
R950

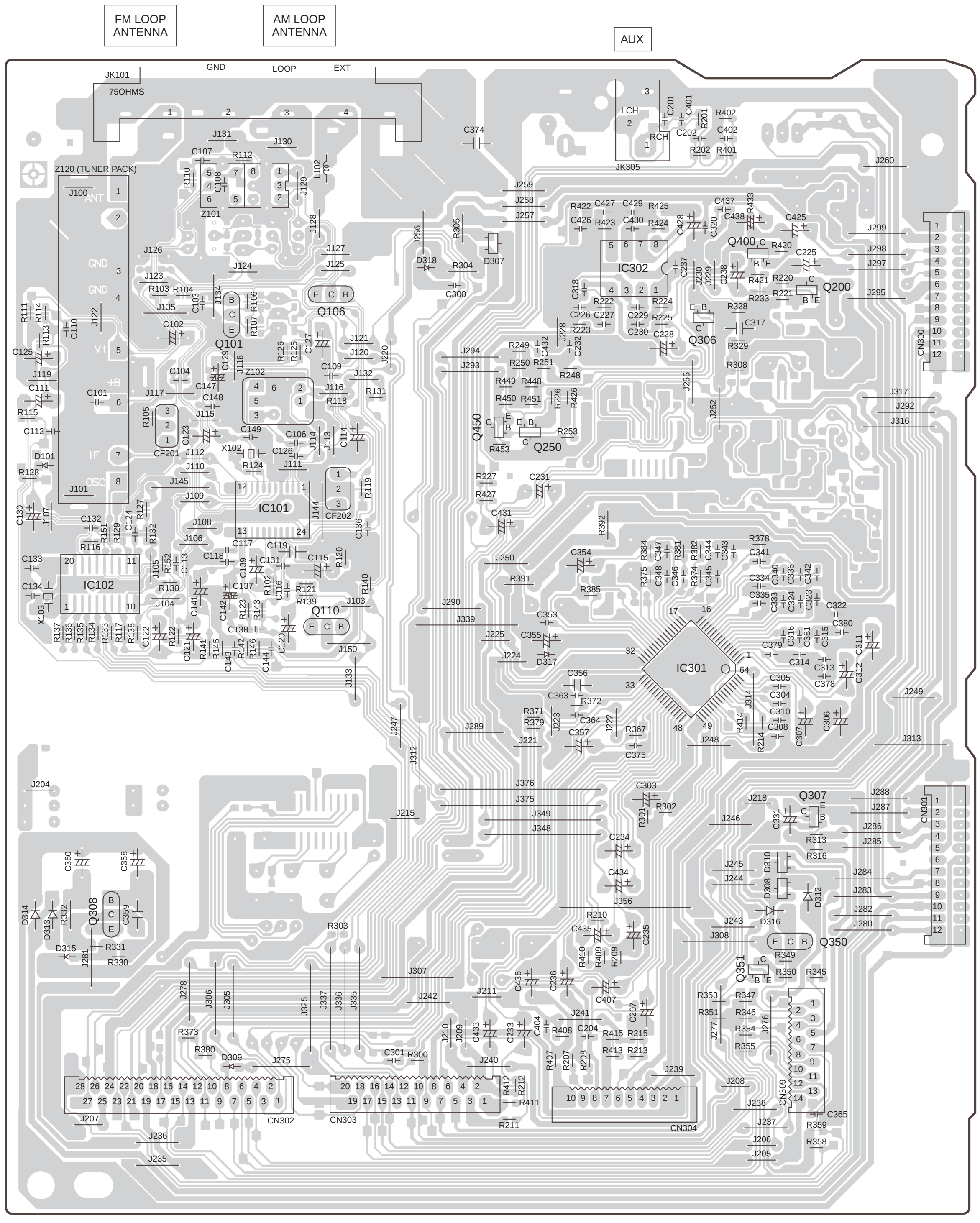
E MECHANISM (DECK1) P.C.B (REPX0108)


S953
CR02
J1
S952
HALF
J2
S951
MODE
CS951
1 2 3 4 5 6 7 8 9
R952
D951
IC951
2 1
3 4
R953
PL+
PL-
SOLENOID

F MECHANISM (DECK2) P.C.B (REPX0108A)

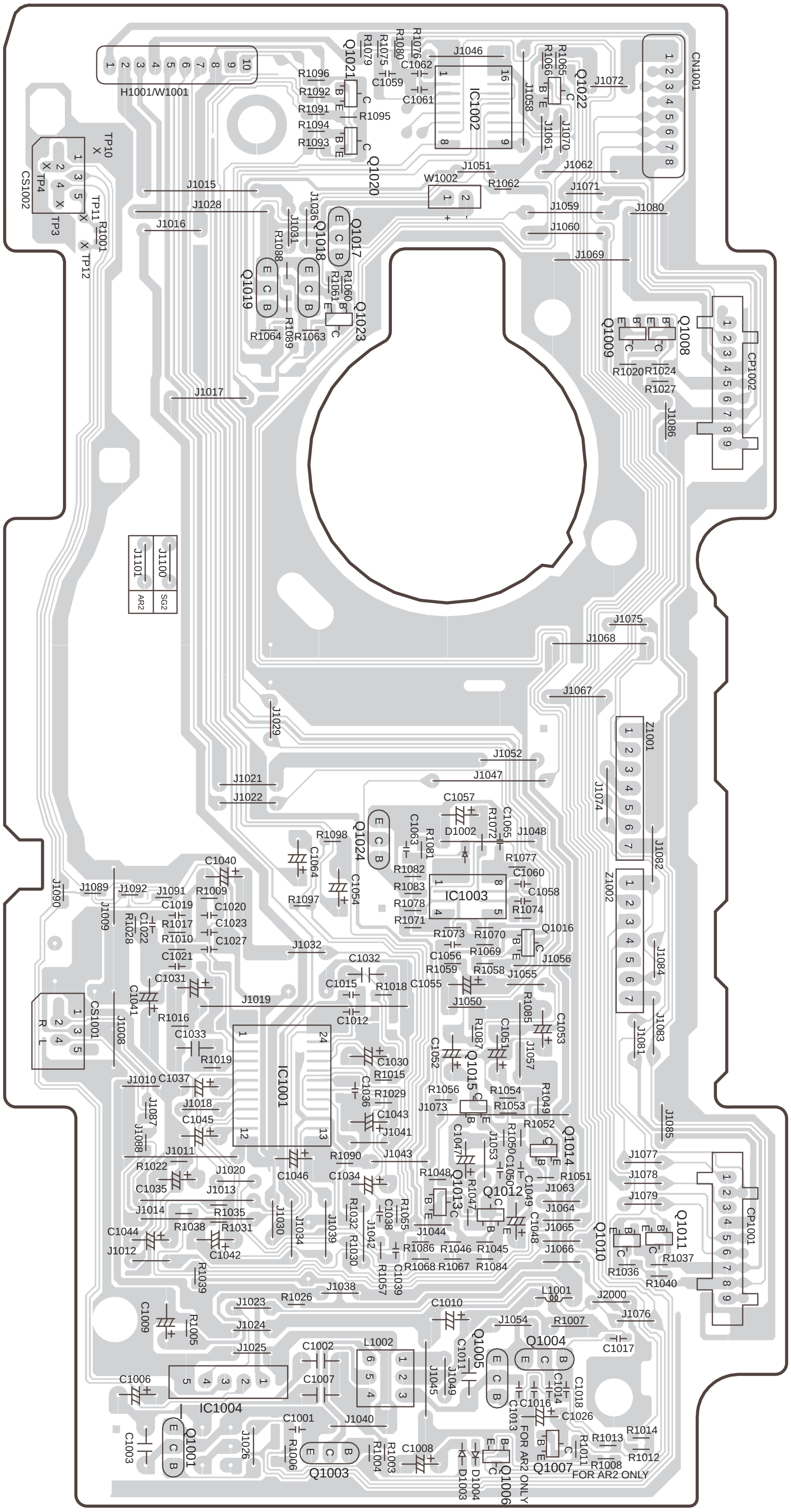

S973
CR02
J1
Z971
7
6
5
4
3
2
1
S972
HALF
J3
S971
MODE
CS971
1 2 3 4 5 6 7 8 9
FWD
S975
REV
S974
D971
IC971
2 1
3 4
R973
R972
J2
PL+
PL-
SOLENOID

B MAIN / TUNER P.C.B. (REPX0232E)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
FM LOOP ANTENNA
AM LOOP ANTENNA
AUX
JK101
75OHMS
GND
LOOP
EXT
LCH
RCH
JK305
Z120 (TUNER PACK)
ANT
GND
GND
VT
+B
IF
OSC
Z101
Z102
IC101
IC102
IC301
IC302
Q101
Q106
Q110
Q200
Q250
Q306
Q307
Q308
Q350
Q351
Q400
Q450
CF201
CF202
X102
X103
D101
D307
D308
D309
D310
D312
D313
D314
D315
D316
D317
D318
CN300
CN301
CN302
CN303
CN304
CN309
C374
C300
C301
C201
C401
C202
C402
R201
R202
R401
R402
J260
J259
J258
J257
J256
R305
R304
J299
J298
J297
J295
J317
J292
J316
J249
J313
J288
J287
J286
J285
J284
J283
J282
J280
J204
J215
J207
J236
J235
J275
J239
J206
J205
J237
J238
J208
R359
R358
C365
R211
R411
R412
R212
J376
J375
J349
J348
J356
J290
J339
J289
J250
J225
J224
J221
J248
J247
J312
J133
J150
J307
J242
J211
J241
J240
R300

	A	B	C	D	E	F	G

K DECK P.C.B. (REPX0198B)



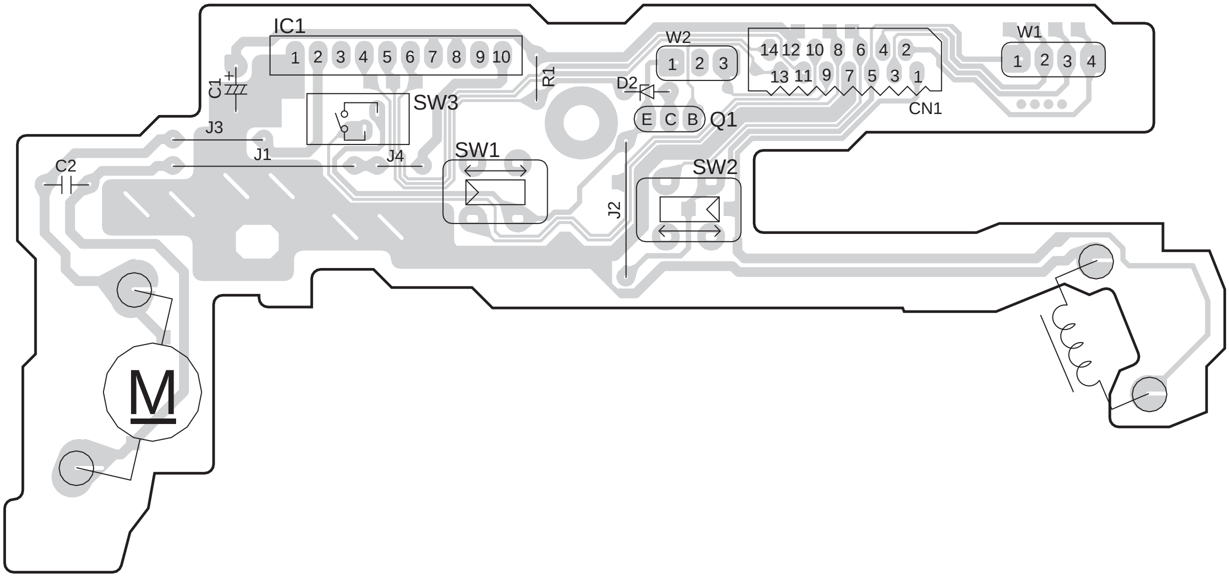
H1001/W1001
CN1001
CS1002
TP3
TP4
TP10
TP11
TP12
R1001
IC1002
Q1020
Q1021
Q1022
R1096
R1092
R1091
R1094
R1093
R1095
R1079
R1075
R1080
R1076
C1059
C1062
C1061
J1046
J1058
R1065
R1066
J1061
J1070
J1072
J1051
W1002
R1062
J1062
J1071
J1059
J1080
J1060
J1069
J1015
J1028
J1016
J1036
J1031
Q1017
Q1018
Q1019
Q1023
R1088
R1060
R1061
R1089
R1064
R1063
Q1008
Q1009
R1020
R1024
R1027
CP1002
J1086
J1017
J1100
J1101
SG2
AR2
J1075
J1068
J1067
J1029
Z1001
J1074
J1052
J1047
J1021
J1022
C1057
C1065
J1048
R1072
D1002
C1063
R1081
Q1024
R1098
C1064
C1054
R1082
R1077
C1060
R1083
IC1003
C1058
R1078
R1074
R1071
R1097
J1082
Z1002
C1040
J1090
J1089
J1092
J1091
R1009
C1019
C1020
C1022
R1017
C1023
J1009
R1028
R1010
C1027
R1073
R1070
Q1016
C1056
R1069
J1056
J1032
C1021
C1032
R1059
R1058
J1055
C1031
C1041
C1015
R1018
C1055
J1050
J1084
J1019
CS1001
R L
J1008
R1016
C1012
R1087
R1085
C1053
C1033
IC1001
C1030
C1052
Q1015
C1051
J1057
J1083
J1081
R1019
R1015
J1010
C1037
C1036
R1029
R1056
R1054
R1049
J1018
C1043
J1073
R1053
J1087
J1088
C1045
J1041
C1047
J1053
R1050
R1052
Q1014
J1085
J1011
C1046
R1090
J1043
C1050
J1077
R1022
J1020
C1034
R1048
R1051
J1078
C1035
J1013
Q1013
Q1012
J1063
J1079
R1047
C1049
J1014
R1035
J1030
J1034
J1039
R1032
C1038
R1055
J1064
C1044
R1038
R1031
J1042
J1044
C1048
J1065
Q1010
Q1011
J1012
C1042
R1030
R1086
R1046
R1045
J1066
R1037
R1036
R1039
R1057
C1039
R1068
R1067
R1084
R1040
CP1001
J1038
L1001
J2000
J1023
R1026
C1010
C1009
R1005
J1054
R1007
J1076
J1024
Q1005
Q1004
C1017
J1025
C1002
L1002
C1011
C1014
C1018
C1006
C1007
J1045
J1049
C1016
IC1004
C1013
C1026
C1001
J1040
R1014
C1003
Q1001
J1026
R1006
R1004
R1003
C1008
D1004
D1003
Q1006
Q1007
FOR AR2 ONLY
R1011
R1013
R1008
R1012
FOR AR2 ONLY
Q1003

1
2
3
4
5
6
7
8
9

A B C D E F G

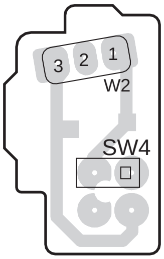
1 2 3 4 5 6 7 8 9

G CD LOADING P.C.B (REP2578A-N)

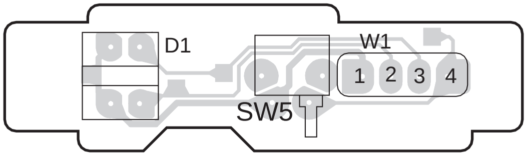


IC1
1 2 3 4 5 6 7 8 9 10
C1
+
SW3
R1
D2
W2
1 2 3
14 12 10 8 6 4 2
13 11 9 7 5 3 1
CN1
W1
1 2 3 4
E C B Q1
J3
J1
J4
C2
SW1
SW2
J2
M

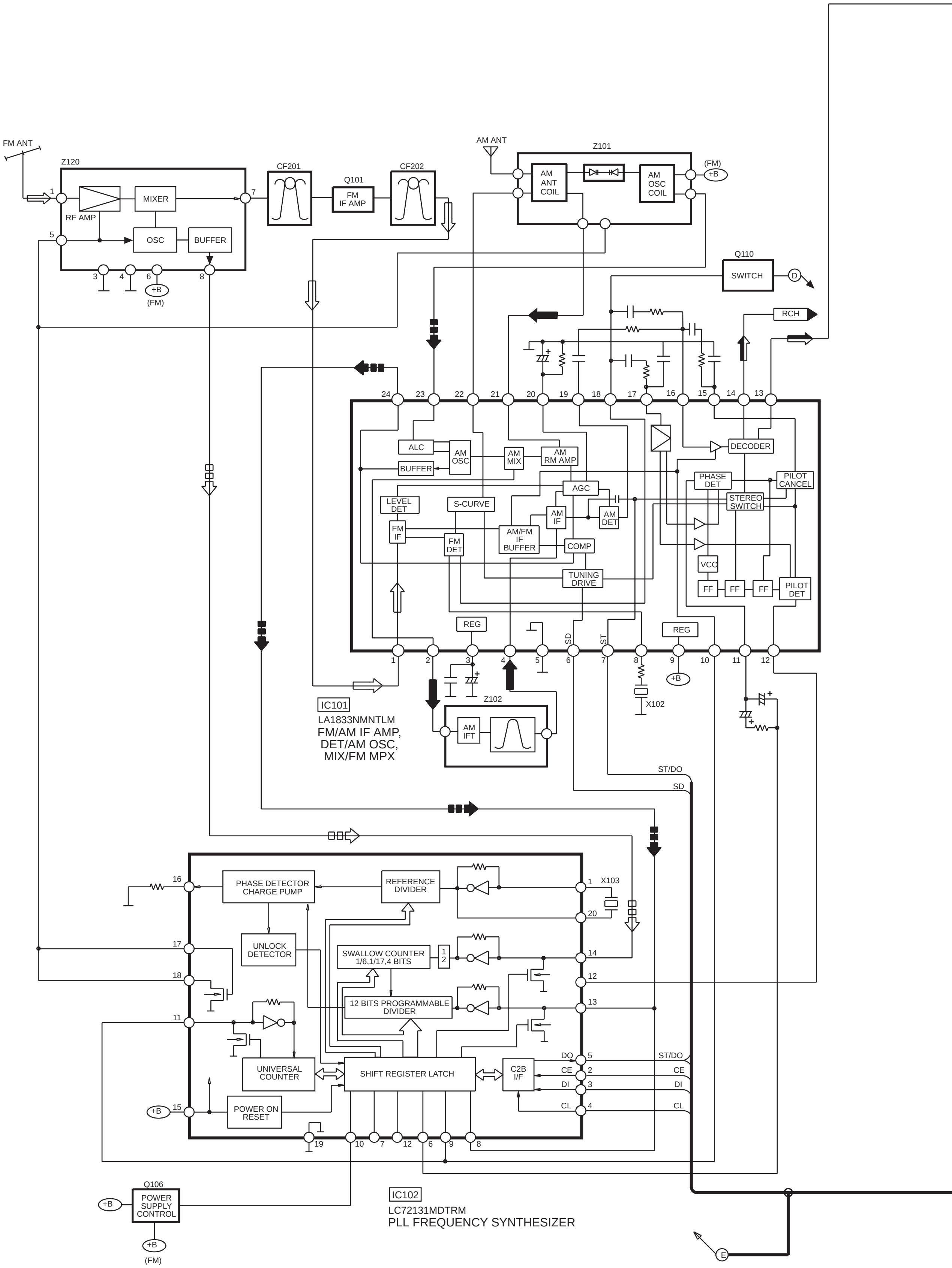
I CD DETACT P.C.B (REP2578A-N)

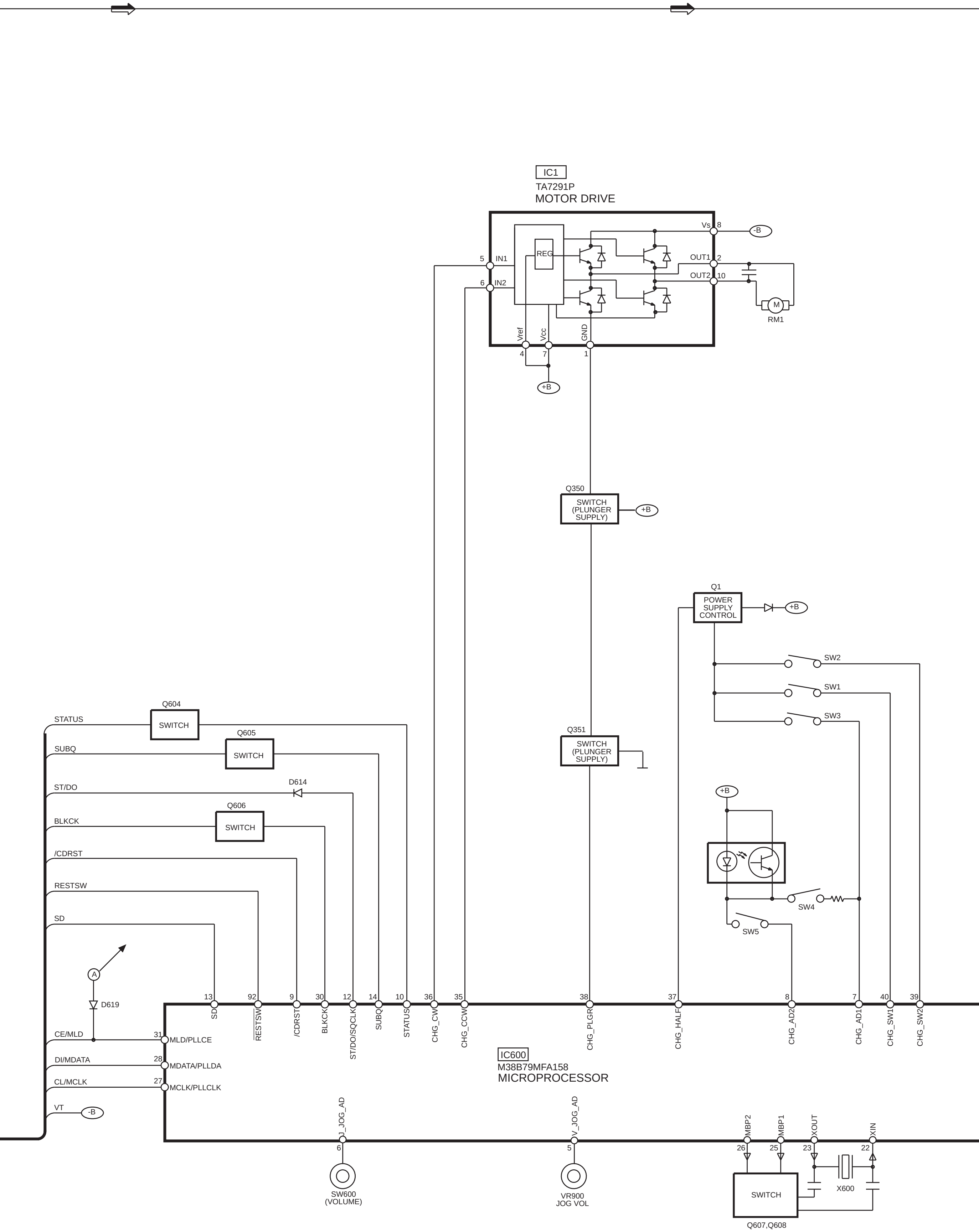


H SPINDLE POSITION P.C.B (REP2578A-N)

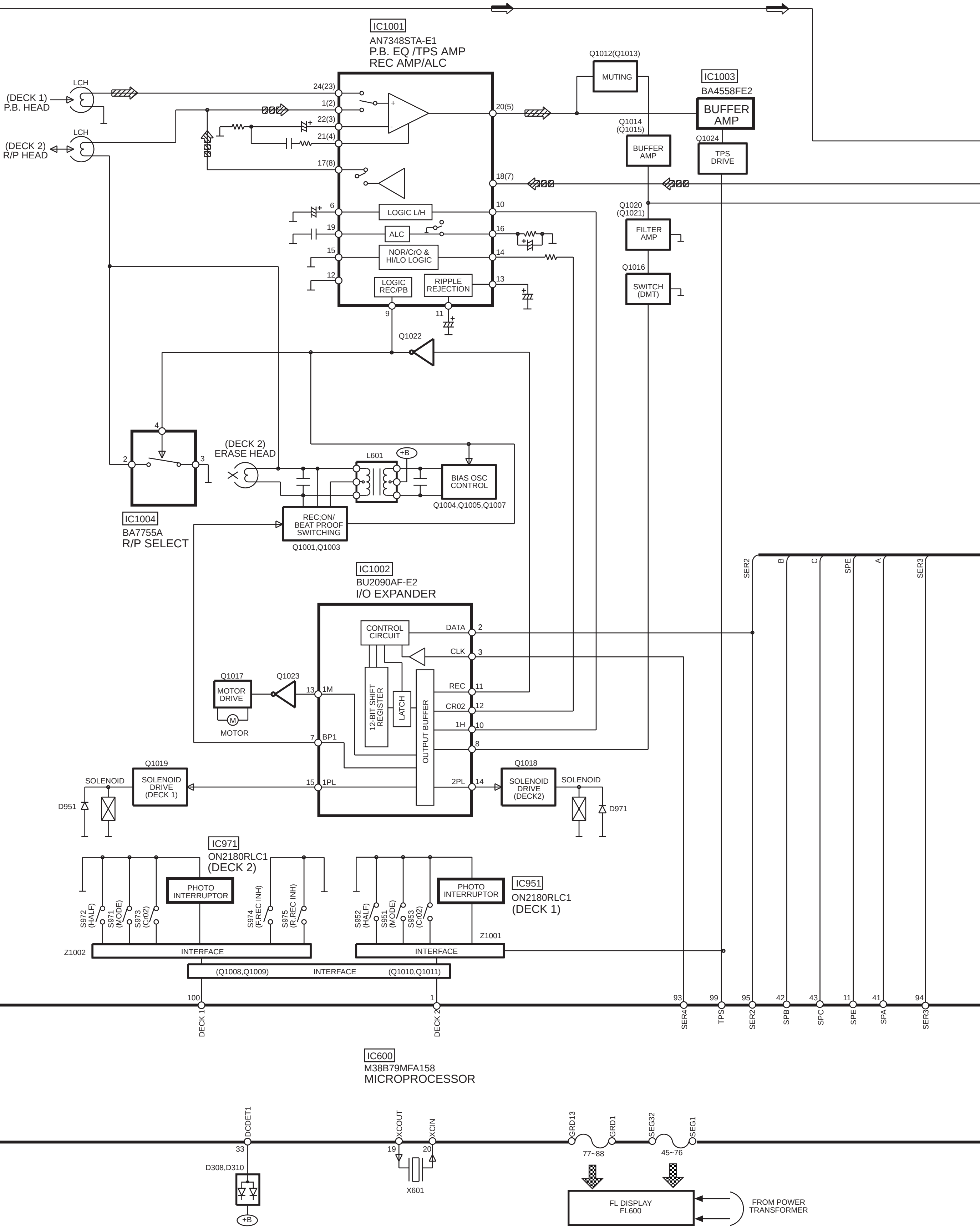


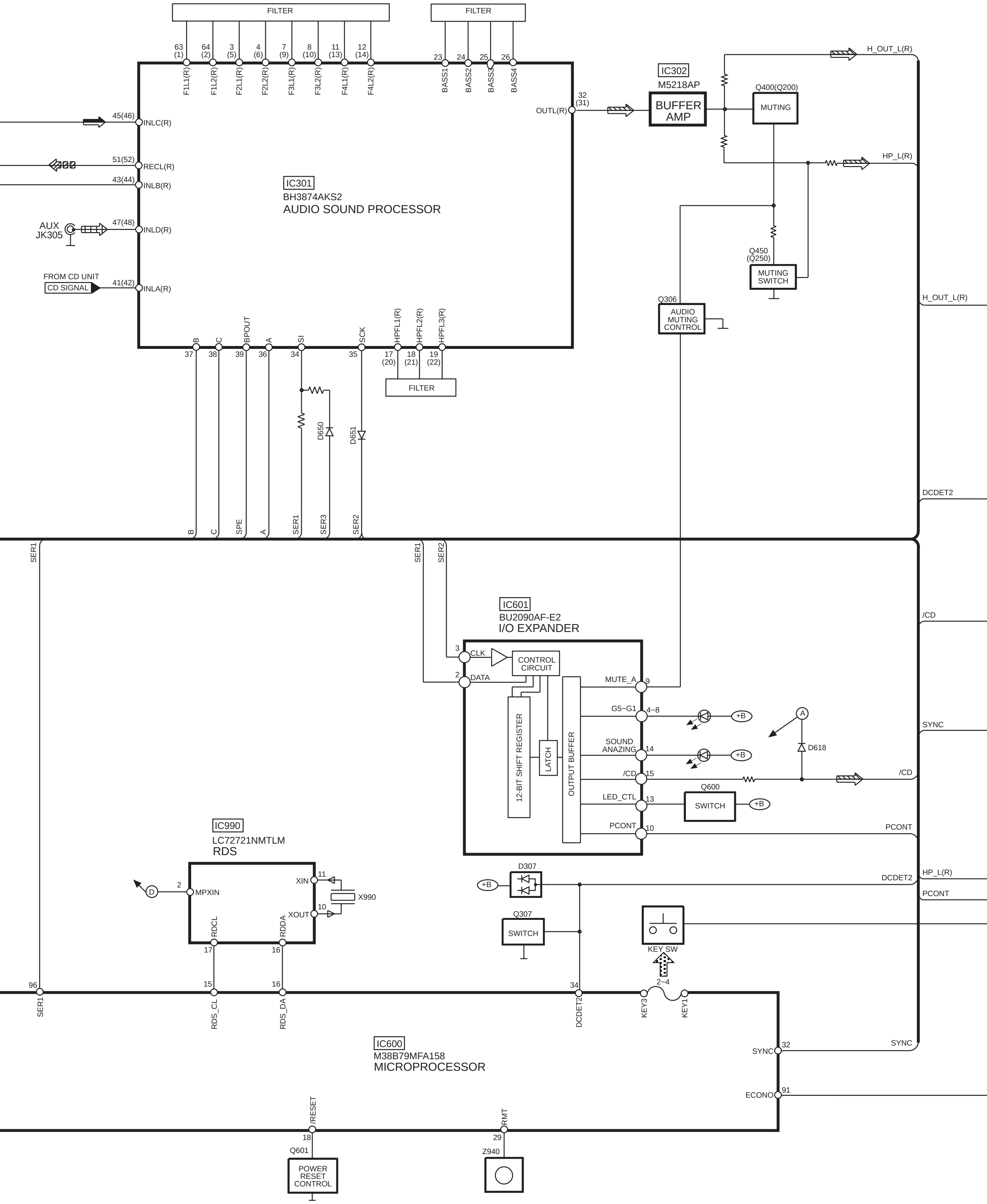
D1
W1
1 2 3 4
SW5


FM ANT
Z120
RF AMP
MIXER
OSC
BUFFER
+B
(FM)
CF201
Q101
FM
IF AMP
CF202
AM ANT
Z101
AM
ANT
COIL
AM
OSC
COIL
(FM)
+B
Q110
SWITCH
D
RCH
ALC
AM
OSC
BUFFER
AM
MIX
AM
RM AMP
AGC
LEVEL
DET
S-CURVE
FM
IF
FM
DET
AM/FM
IF
BUFFER
AM
IF
AM
DET
COMP
TUNING
DRIVE
DECODER
PHASE
DET
PILOT
CANCEL
STEREO
SWITCH
VCO
FF
FF
FF
PILOT
DET
REG
REG
SD
ST
+B
X102
Z102
AM
IFT
IC101
LA1833NMNTLM
FM/AM IF AMP,
DET/AM OSC,
MIX/FM MPX
ST/DO
SD
PHASE DETECTOR
CHARGE PUMP
REFERENCE
DIVIDER
X103
UNLOCK
DETECTOR
SWALLOW COUNTER
1/6,1/17,4 BITS
1
2
12 BITS PROGRAMMABLE
DIVIDER
UNIVERSAL
COUNTER
SHIFT REGISTER LATCH
C2B
I/F
POWER ON
RESET
+B
DO
CE
DI
CL
ST/DO
CE
DI
CL
Q106
POWER
SUPPLY
CONTROL
+B
+B
(FM)
IC102
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
E



IC1
TA7291P
MOTOR DRIVE
REG
IN1
IN2
5
6
Vs
8
-B
OUT1
2
OUT2
10
M
RM1
Vref
Vcc
GND
4
7
1
+B
Q350
SWITCH (PLUNGER SUPPLY)
+B
Q351
SWITCH (PLUNGER SUPPLY)
Q1
POWER SUPPLY CONTROL
+B
SW2
SW1
SW3
+B
SW4
SW5
Q604
SWITCH
Q605
SWITCH
D614
Q606
SWITCH
STATUS
SUBQ
ST/DO
BLKCK
/CDRST
RESTSW
SD
A
D619
CE/MLD
DI/MDATA
CL/MCLK
VT
-B
13
SD
92
RESTSW
9
/CDRST
30
BLKCK
12
ST/DO/SQCLK
14
SUBQ
10
STATUS
36
CHG_CW
35
CHG_CCW
38
CHG_PLGR
37
CHG_HALF
8
CHG_AD2
7
CHG_AD1
40
CHG_SW1
39
CHG_SW2
31
MLD/PLLCE
28
MDATA/PLLDA
27
MCLK/PLLCLK
IC600
M38B79MFA158
MICROPROCESSOR
J_JOG_AD
6
V_JOG_AD
5
MBP2
26
MBP1
25
XOUT
23
XIN
22
SW600 (VOLUME)
VR900 JOG VOL
SWITCH
Q607,Q608
X600

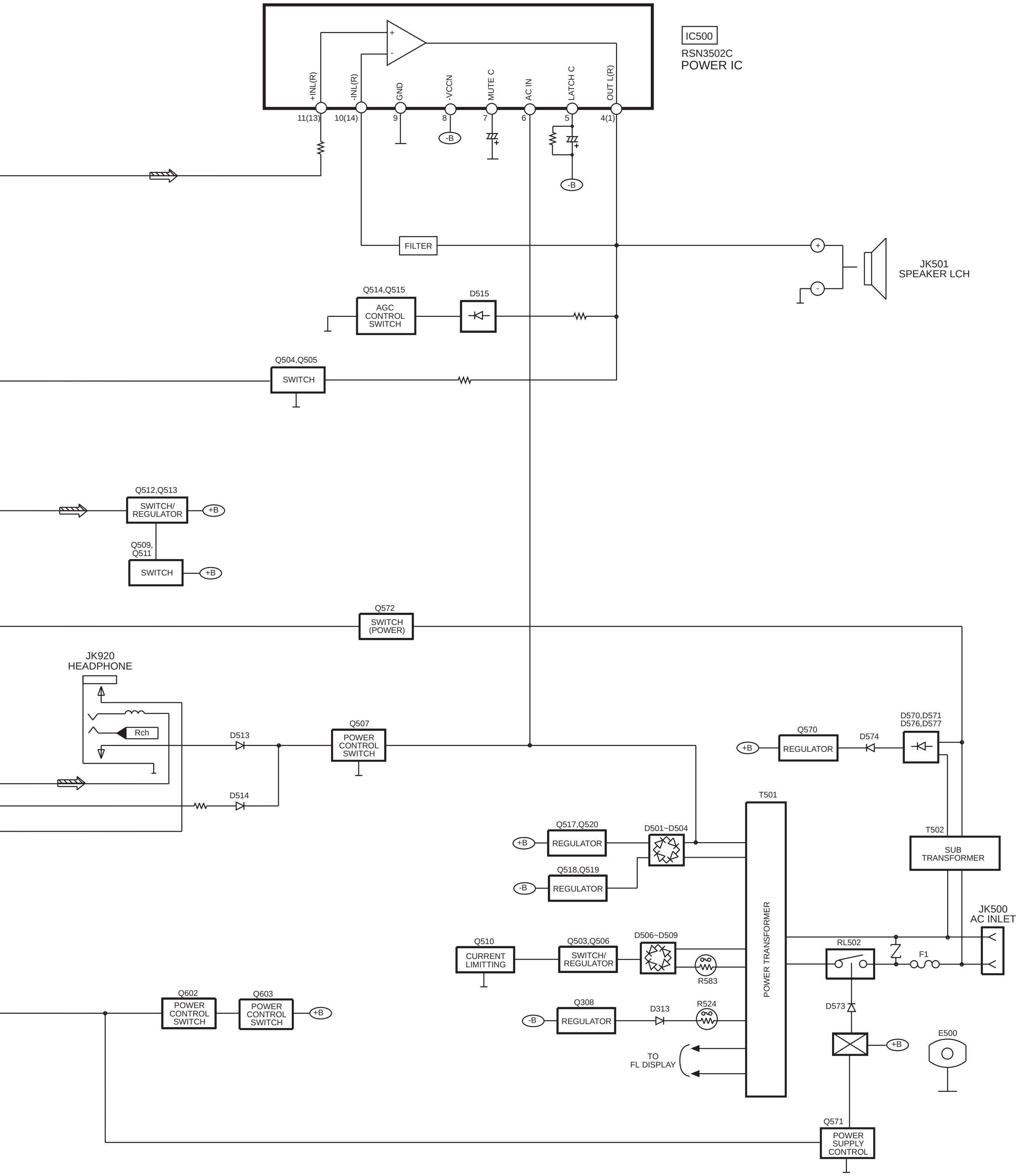

IC1001
AN7348STA-E1
P.B. EQ /TPS AMP
REC AMP/ALC
LCH
(DECK 1)
P.B. HEAD
LCH
(DECK 2)
R/P HEAD
24(23)
1(2)
22(3)
21(4)
17(8)
20(5)
18(7)
6
19
15
12
10
16
14
13
9
11
LOGIC L/H
ALC
NOR/CrO &
HI/LO LOGIC
LOGIC
REC/PB
RIPPLE
REJECTION
Q1012(Q1013)
MUTING
IC1003
BA4558FE2
BUFFER
AMP
Q1014
(Q1015)
BUFFER
AMP
Q1024
TPS
DRIVE
Q1020
(Q1021)
FILTER
AMP
Q1016
SWITCH
(DMT)
Q1022
4
2
3
IC1004
BA7755A
R/P SELECT
(DECK 2)
ERASE HEAD
L601
+B
BIAS OSC
CONTROL
Q1004,Q1005,Q1007
REC;ON/
BEAT PROOF
SWITCHING
Q1001,Q1003
IC1002
BU2090AF-E2
I/O EXPANDER
CONTROL
CIRCUIT
12-BIT SHIFT
REGISTER
LATCH
OUTPUT BUFFER
DATA
2
CLK
3
REC
11
CR02
12
1H
10
8
2PL
14
13
1M
7
BP1
15
1PL
Q1017
MOTOR
DRIVE
Q1023
M
MOTOR
Q1019
SOLENOID
DRIVE
(DECK 1)
SOLENOID
D951
Q1018
SOLENOID
DRIVE
(DECK2)
SOLENOID
D971
SER2
B
C
SPE
A
SER3
IC971
ON2180RLC1
(DECK 2)
PHOTO
INTERRUPTOR
S972
(HALF)
S971
(MODE)
S973
(Cr02)
S974
(F.REC INH)
S975
(R.REC INH)
Z1002
INTERFACE
PHOTO
INTERRUPTOR
IC951
ON2180RLC1
(DECK 1)
S952
(HALF)
S951
(MODE)
S953
(Cr02)
Z1001
INTERFACE
(Q1008,Q1009)
INTERFACE
(Q1010,Q1011)
100
DECK 1
1
DECK 2
93
SER4
99
TPS
95
SER2
42
SPB
43
SPC
11
SPE
41
SPA
94
SER3
IC600
M38B79MFA158
MICROPROCESSOR
DCDET1
33
D308,D310
+B
XCOUT
XCIN
19
20
X601
GRD13
GRD1
77~88
SEG32
SEG1
45~76
FL DISPLAY
FL600
FROM POWER
TRANSFORMER

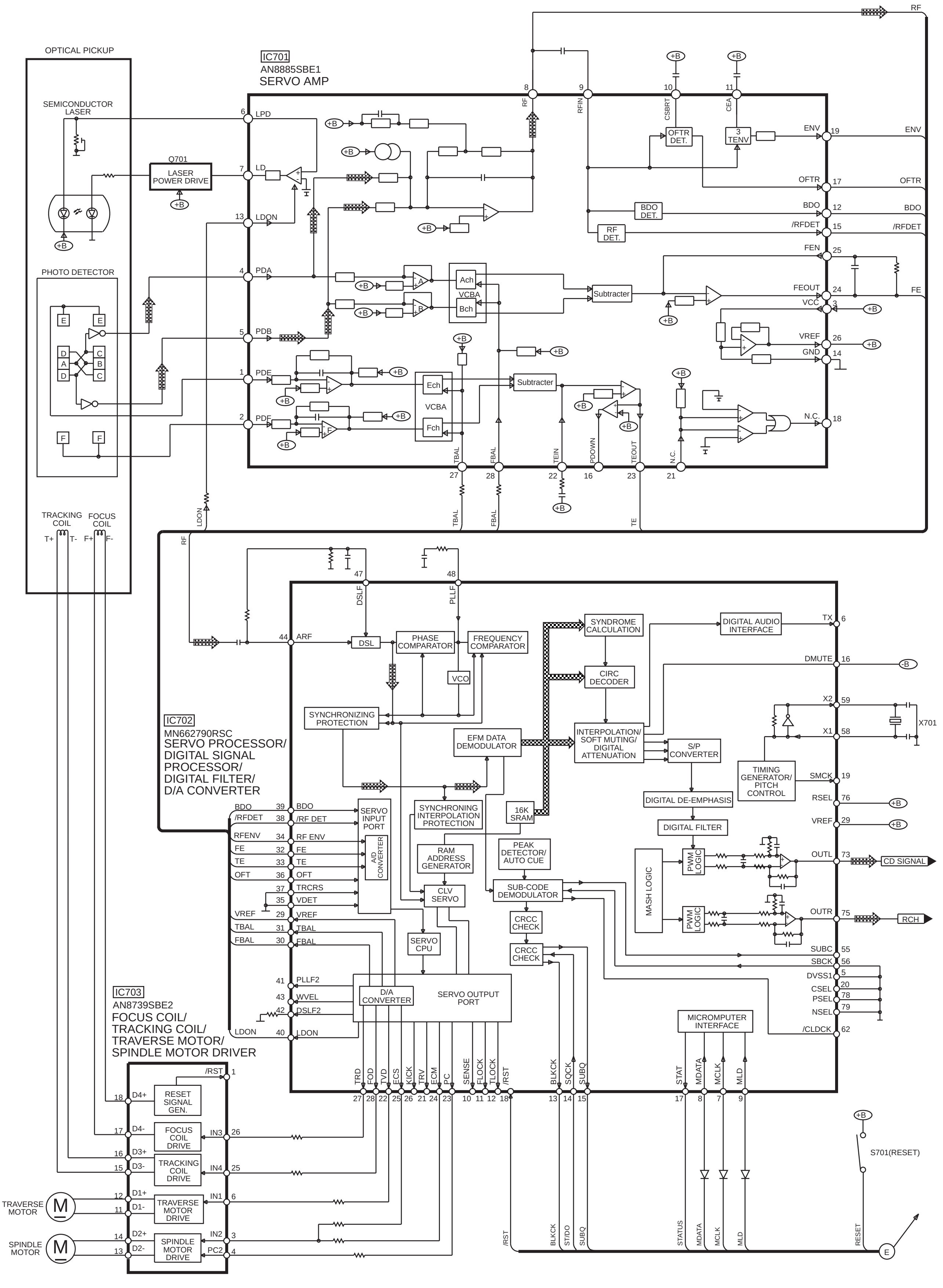

FILTER
FILTER
63 (1) F1L1(R)
64 (2) F1L2(R)
3 (5) F2L1(R)
4 (6) F2L2(R)
7 (9) F3L1(R)
8 (10) F3L2(R)
11 (13) F4L1(R)
12 (14) F4L2(R)
23 BASS1
24 BASS2
25 BASS3
26 BASS4
45(46) INLC(R)
51(52) RECL(R)
43(44) INLB(R)
AUX JK305
47(48) INLD(R)
FROM CD UNIT
CD SIGNAL
41(42) INLA(R)
IC301
BH3874AKS2
AUDIO SOUND PROCESSOR
32 (31) OUTL(R)
IC302
M5218AP
BUFFER AMP
Q400(Q200)
MUTING
H_OUT_L(R)
HP_L(R)
Q450 (Q250)
MUTING SWITCH
Q306
AUDIO MUTING CONTROL
H_OUT_L(R)
B 37
C 38
BPOUT 39
A 36
SI 34
SCK 35
HPFL1(R) 17 (20)
HPFL2(R) 18 (21)
HPFL3(R) 19 (22)
FILTER
D650
D651
B
C
SPE
A
SER1
SER3
SER2
DCDET2
SER1
SER1
SER2
IC601
BU2090AF-E2
I/O EXPANDER
3 CLK
2 DATA
CONTROL CIRCUIT
12-BIT SHIFT REGISTER
LATCH
OUTPUT BUFFER
MUTE_A 9
G5~G1 4~8
SOUND ANAZING 14
/CD 15
LED_CTL 13
PCONT 10
+B
+B
A
D618
/CD
/CD
Q600
SWITCH
+B
SYNC
PCONT
IC990
LC72721NMTLM
RDS
D
2 MPXIN
XIN 11
XOUT 10
X990
RDCL 17
RDDA 16
D307
+B
Q307
SWITCH
DCDET2
HP_L(R)
PCONT
KEY SW
2~4
96 SER1
15 RDS_CL
16 RDS_DA
34 DCDET2
KEY3
KEY1
IC600
M38B79MFA158
MICROPROCESSOR
SYNC 32
SYNC
ECONO 91
/RESET 18
RMT 29
Q601
POWER RESET CONTROL
Z940

SIGNAL LINES

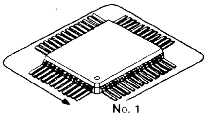
MAIN SIGNAL LINE	CD SIGNAL LINE	AM SIGNAL LINE	PLAYBACK SIGNAL LINE
FM OSC SIGNAL LINE	AM OSC SIGNAL LINE	FM & AM SIGNALS LINE	RECORDING SIGNAL LINE
FM SIGNAL LINE			

(   ) indicates Pin No. of right channel

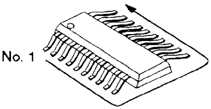

IC500
RSN3502C
POWER IC
+INL(R)
-INL(R)
GND
-VCCN
MUTE C
AC IN
LATCH C
OUT L(R)
11(13)
10(14)
9
8
7
6
5
4(1)
-B
-B
FILTER
JK501
SPEAKER LCH
Q514,Q515
AGC CONTROL SWITCH
D515
Q504,Q505
SWITCH
Q512,Q513
SWITCH/ REGULATOR
+B
Q509, Q511
SWITCH
+B
Q572
SWITCH (POWER)
JK920
HEADPHONE
Rch
D513
D514
Q507
POWER CONTROL SWITCH
Q570
REGULATOR
+B
D574
D570,D571
D576,D577
T501
T502
SUB TRANSFORMER
Q517,Q520
REGULATOR
+B
D501~D504
Q518,Q519
REGULATOR
-B
POWER TRANSFORMER
JK500
AC INLET
Q510
CURRENT LIMITTING
Q503,Q506
SWITCH/ REGULATOR
D506~D509
R583
RL502
F1
D573
Q308
REGULATOR
-B
D313
R524
TO FL DISPLAY
+B
E500
Q602
POWER CONTROL SWITCH
Q603
POWER CONTROL SWITCH
+B
Q571
POWER SUPPLY CONTROL


OPTICAL PICKUP
SEMICONDUCTOR LASER
PHOTO DETECTOR
E
E
D
A
D
C
B
C
F
F
TRACKING COIL
FOCUS COIL
T+
T-
F+
F-
Q701
LASER POWER DRIVE
+B
IC701
AN8885SBE1
SERVO AMP
RF
8
9
10
11
RFIN
CSBRT
CEA
6 LPD
7 LD
13 LDON
4 PDA
5 PDB
1 PDE
2 PDF
OFTR DET.
3 TENV
BDO DET.
RF DET.
A
B
Ach
Bch
VCBA
Subtracter
Ech
Fch
VCBA
Subtracter
ENV 19 ENV
OFTR 17 OFTR
BDO 12 BDO
/RFDET 15 /RFDET
FEN 25
FEOUT 24 FE
VCC 3
VREF 26
GND 14
N.C. 18
TBAL 27
FBAL 28
TEIN 22
PDOWN 16
TEOUT 23
N.C. 21
TBAL
FBAL
TE
LDON
RF
IC702
MN662790RSC
SERVO PROCESSOR/
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
47 DSLF
48 PLLF
44 ARF
DSL
PHASE COMPARATOR
FREQUENCY COMPARATOR
VCO
SYNCHRONIZING PROTECTION
EFM DATA DEMODULATOR
SYNDROME CALCULATION
CIRC DECODER
INTERPOLATION/ SOFT MUTING/ DIGITAL ATTENUATION
S/P CONVERTER
DIGITAL AUDIO INTERFACE
TX 6
DMUTE 16
-B
X2 59
X1 58
X701
TIMING GENERATOR/ PITCH CONTROL
SMCK 19
RSEL 76
VREF 29
DIGITAL DE-EMPHASIS
DIGITAL FILTER
16K SRAM
SYNCHRONING INTERPOLATION PROTECTION
RAM ADDRESS GENERATOR
PEAK DETECTOR/ AUTO CUE
SUB-CODE DEMODULATOR
CRCC CHECK
CRCC CHECK
CLV SERVO
SERVO INPUT PORT
A/D CONVERTER
SERVO CPU
D/A CONVERTER
SERVO OUTPUT PORT
MASH LOGIC
PWM LOGIC
PWM LOGIC
OUTL 73
CD SIGNAL
OUTR 75
RCH
SUBC 55
SBCK 56
DVSS1 5
CSEL 20
PSEL 78
NSEL 79
/CLDCK 62
MICROMPUTER INTERFACE
BDO 39 BDO
/RFDET 38 /RF DET
RFENV 34 RF ENV
FE 32 FE
TE 33 TE
OFT 36 OFT
37 TRCRS
35 VDET
VREF 29 VREF
TBAL 31 TBAL
FBAL 30 FBAL
41 PLLF2
43 WVEL
42 DSLF2
LDON 40 LDON
TRD 27
FOD 28
TVD 22
ECS 25
KICK 26
TRV 21
ECM 24
PC 23
SENSE 10
FLOCK 11
TLOCK 12
/RST 18
BLKCK 13
SQCK 14
SUBQ 15
STAT 17
MDATA 8
MCLK 7
MLD 9
IC703
AN8739SBE2
FOCUS COIL/
TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVER
/RST 1
18 D4+
RESET SIGNAL GEN.
17 D4-
FOCUS COIL DRIVE
IN3 26
16 D3+
15 D3-
TRACKING COIL DRIVE
IN4 25
12 D1+
11 D1-
TRAVERSE MOTOR DRIVE
IN1 6
14 D2+
13 D2-
SPINDLE MOTOR DRIVE
IN2 3
PC2 4
TRAVERSE MOTOR
SPINDLE MOTOR
M
M
S701(RESET)
/RST
BLKCK
ST/DO
SUBQ
STATUS
MDATA
MCLK
MLD
RESET
E

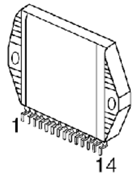
M38B79MFA158 (100P)
MN662790RSC (80P)
BH3874AKS2 (64P)



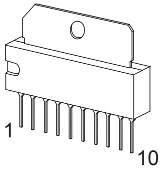
AN8885SBE1 (28P)
AN7348STA-E1 (24P)
BA4558FE2 (8P)
BU2090AF-E2 (16P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)
LC72721NMTLM (20P)



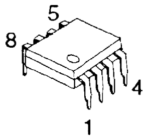
RSN3502C (14P)



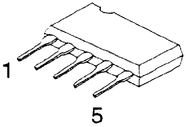
TA7291P



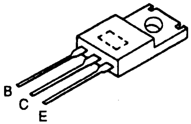
M5218AP



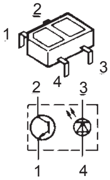
BA7755A



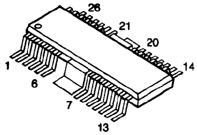
KTC2026
KTA1046



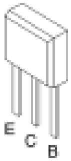
0N2180RLC1



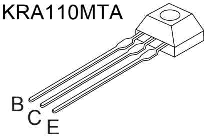
AN8739SBE2


26
21
20
14
1
6
7
13

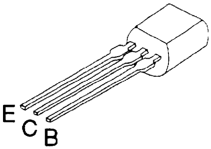
2SC2058SPTA



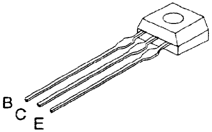
KRA102MTA
KRC102MTA
KRC103MTA
KRA110MTA



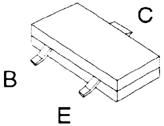
2SB621ARSTA
KTA12710YTA
KTC32030YTA
KTC3205Y
KTD1146YTA
KRC101MTA



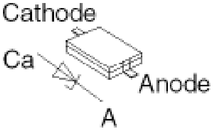
2SA933SSTA
2SC3311ARTA
2SD2144STA
KTC3199GRTA
RVTDTC143EST



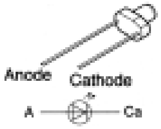
2SA1037AKSTX
2SC2412KT96R
KRA102STA
KRC102STA
KRC111STA
KTC3875GRTA
KTD1304TA



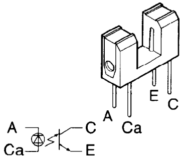
MA8300MTX
1SS355TE17
UDZSTE175R1B
UDZSTE177R5B
UDZSTE173R6B
UDZSTE179R1B


Cathode
Ca
Anode
A

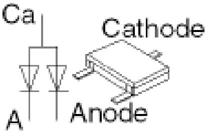
SLI325URCT31
SLR325DCT31
SLR325MCT31W


Anode
Cathode
A
Ca

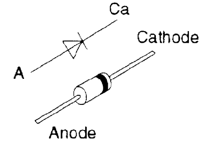
GP1S94


E
C
A
Ca
A
C
Ca
E

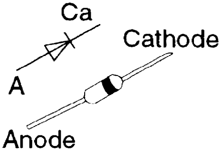
DAP202KT146


Ca
Cathode
A
Anode

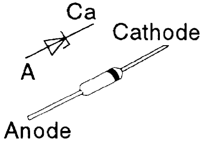
1T3T
1N5402BM21
RL1N4003S-P


Ca
Cathode
A
Anode

RVD1SS133TA
1SS291TA
MA165TA
MA2C700A0F
MA723TA


Ca
Cathode
A
Anode

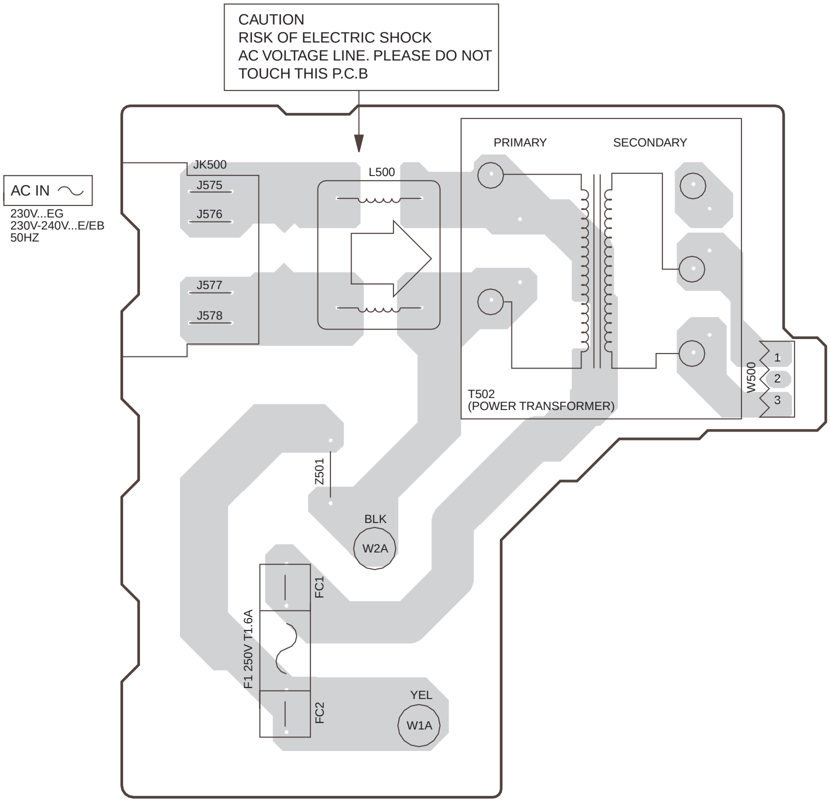
MA4020LTA
MTZJ6R8BTA
MTZJ4R7BTA
MTZJ5R1BTA
MTZJ5R6BTA
MTZJ10BTA
MTZJ15CTA


Ca
Cathode
A
Anode

A B C D E F G

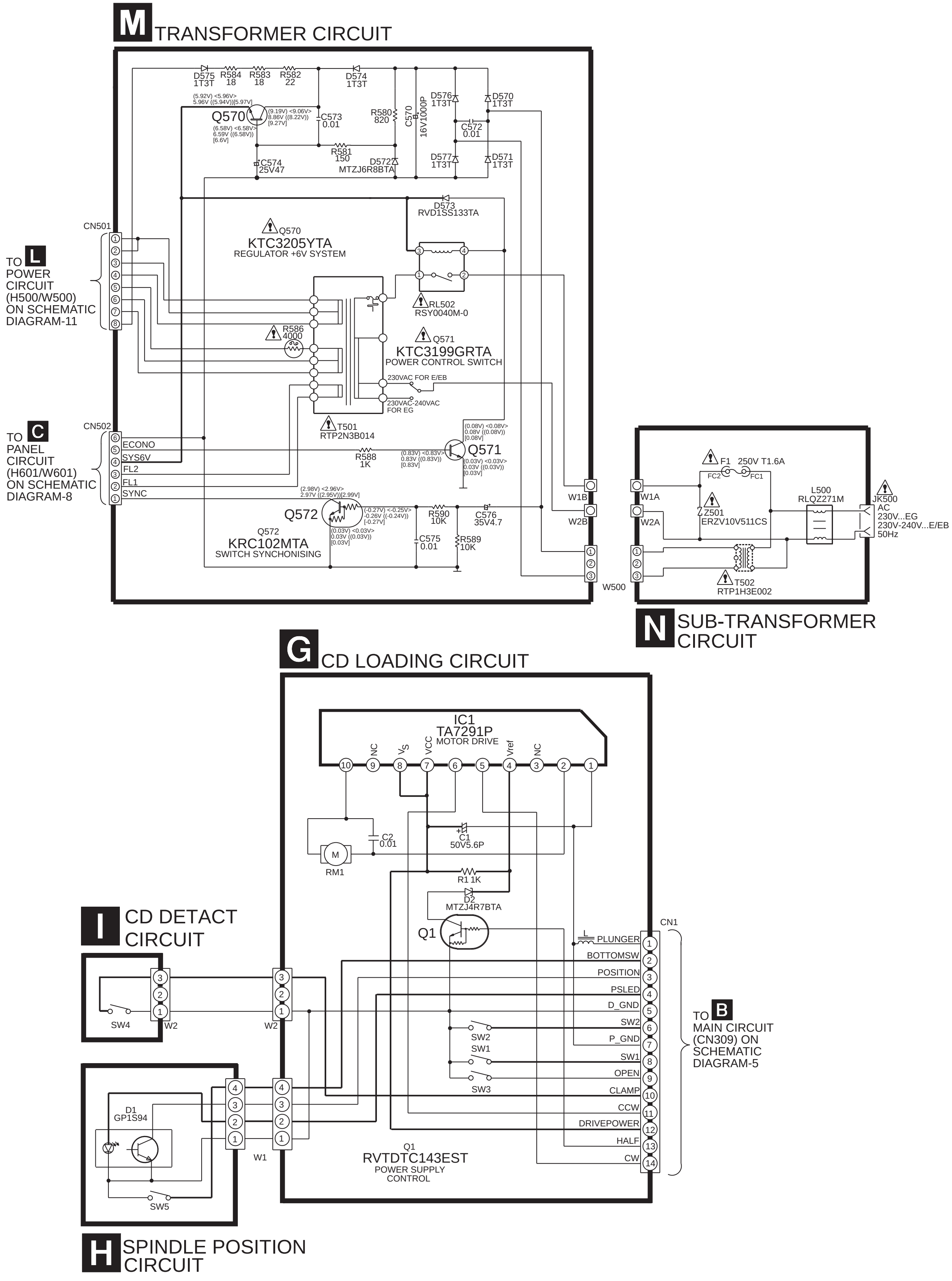
1 2 3 4 5 6 7 8 9

N SUB-TRANSFORMER P.C.B. (REPX0256C...EG)
(REPX0256D...E/EB)


CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B
AC IN ~
230V...EG
230V-240V...E/EB
50HZ
JK500
J575
J576
J577
J578
L500
PRIMARY
SECONDARY
T502
(POWER TRANSFORMER)
W500
1
2
3
Z501
BLK
W2A
FC1
F1 250V T1.6A
FC2
YEL
W1A

SCHEMATIC DIAGRAM -12

: +B SIGNAL LINE


M TRANSFORMER CIRCUIT
D575 1T3T
R584 18
R583 18
R582 22
D574 1T3T
(5.92V) <5.96V> 5.96V ((5.94V))[5.97V]
Q570
(9.19V) <9.06V> 8.86V ((8.22V)) [9.27V]
(6.58V) <6.58V> 6.59V ((6.58V)) [6.6V]
C573 0.01
R580 820
C570 16V1000P
D576 1T3T
D570 1T3T
C572 0.01
D577 1T3T
D571 1T3T
R581 150
C574 25V47
D572 MTZJ6R8BTA
D573 RVD1SS133TA
CN501
Q570 KTC3205YTA REGULATOR +6V SYSTEM
TO L POWER CIRCUIT (H500/W500) ON SCHEMATIC DIAGRAM-11
RL502 RSY0040M-0
R586 4000
Q571 KTC3199GRTA POWER CONTROL SWITCH
230VAC FOR E/EB
230VAC-240VAC FOR EG
T501 RTP2N3B014
CN502
TO C PANEL CIRCUIT (H601/W601) ON SCHEMATIC DIAGRAM-8
ECONO
SYS6V
FL2
FL1
SYNC
(0.08V) <0.08V> 0.08V ((0.08V)) [0.08V]
R588 1K
(0.83V) <0.83V> 0.83V ((0.83V)) [0.83V]
Q571
(0.03V) <0.03V> 0.03V ((0.03V)) [0.03V]
(2.98V) <2.96V> 2.97V ((2.95V))[2.99V]
Q572
(-0.27V) <-0.25V> -0.26V ((-0.24V)) [-0.27V]
(0.03V) <0.03V> 0.03V ((0.03V)) [0.03V]
R590 10K
C576 35V4.7
C575 0.01
R589 10K
Q572 KRC102MTA SWITCH SYNCHONISING
W1B
W2B
W500
W1A
W2A
F1 250V T1.6A
FC2
FC1
Z501 ERZV10V511CS
L500 RLQZ271M
JK500 AC 230V...EG 230V-240V...E/EB 50Hz
T502 RTP1H3E002
N SUB-TRANSFORMER CIRCUIT
G CD LOADING CIRCUIT
IC1 TA7291P MOTOR DRIVE
NC
Vs
VCC
Vref
NC
C2 0.01
C1 50V5.6P
M
RM1
R1 1K
D2 MTZJ4R7BTA
Q1
L
PLUNGER
BOTTOMSW
POSITION
PSLED
D_GND
SW2
P_GND
SW1
OPEN
CLAMP
CCW
DRIVEPOWER
HALF
CW
CN1
SW2
SW1
SW3
TO B MAIN CIRCUIT (CN309) ON SCHEMATIC DIAGRAM-5
Q1 RVTDTC143EST POWER SUPPLY CONTROL
I CD DETACT CIRCUIT
SW4
W2
W2
D1 GP1S94
SW5
W1
H SPINDLE POSITION CIRCUIT